THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

VOL. VIII. NO. 31. CLEVELAND, O., AUGUST 5, 1886. $2.00 PER ANNUM SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND.

The schooner Foster is getting a new fore mast at Greenhalgh's spar yard.

The steamers City of Cleveland and Pearl took large excursions to the islands yesterday.

Captain Frank Holland has been appointed master of the propeller Cleveland, and Captain Adam Miller of the schooner Old Concord.

John Dietrich, of the barge Norway, is missing, and it is supposed that he has been drowned. The life saving crew have been dragging for his body.

Captain H. Parker has been appointed master of the schooner Erastus Corning, relieving Captain Foster, who has had temporary command, but who was obliged to attend to his business at this port.

The Globe Iron Works Company have secured a lease of ground which will extend their territory about four hundred feet west of the present works, so that they may be able to put up two boats at once.

A division of the interest of the Globe Shipbuilding Company in the iron steamships J. H. Devereux and William Chisholm, gives each member of the old company 1288–17,500, except J. H. Smith, who holds 598–17,500.

Engineer H. W. McGinnis, of the propeller Sparta, who has been suffering some months from neuralgia in its worst form, has been compelled to lay over, and Engineer George Fitzpatrick will take charge of the Sparta's machinery.

The steam yacht Peerless was inspected by Messrs. DeWolf and MaGrath on the 29th, who allowed her a certificate to carry one hundred persons, including crew. The Peerless will leave soon on a cruise, taking in the north shore of Lake Superior.

Mr. Fred Ballen, draughtsman of the Detroit Drydock Company, came down on the City of Cleveland yesterday. He inspected the working of the machinery of our new namesake, which is now working very smoothly, and developes 2500 horse power.

Mr. Fred Palmer, of the firm of Palmer & Benham, vessel owners and brokers, will start on a pleasure trip to Marquette on the steamer W. L. Wetmore. Mr. Palmer has been attending strictly to business during the last three years and deserves a holiday. His wife and Mrs. Fred Saal will accompany him.

Captain Jack Greening, an old time vessel owner, died at his home on Barber avenue on Tuesday night, aged 81 years. Mr. Greening owned at one time the schooners George Worthington, Correspondent, Emeu, Perseverance, and tugs Old Jack and H. N. Martin. The funeral will take place to day from All Saints church.

In the Globe drydock this week the steamer Progress had buts calked and repairs to rudder and stern bearing. Scow Sassacus had buts calked. Tug J. W. Bennett received a new wheel. Steamer City of Cleveland received a new wheel and had buts calked. Steamer Columbia received a new Globe wheel, 10 feet 6 inches diameter and 13 feet lead.

Engineer Wm. Gibson, of the propeller Hiawatha, while the boat was passing the Sault on Tuesday, had his left arm taken off just above the elbow, probably by a fender, while saluting the engineer of the Justice Field. Mr. Gibson was taken to the marine hospital at the Sault, and amputation found necessary just below the shoulder. Engineer Grant will meet the Hiawatha at Duluth and fill the position made vacant.

On Saturday last the tug Castle visited the wreck of the tug Kate Richmond which went ashore four miles north of this port last fall, for the purpose of ascertaining whether she could be saved. A steam pump was put on board and worked for an hour without effect, and then an examination of the hull was made, which resulted in the discovery that her back was broken. She was accordingly abandoned as a total loss. The Kate Richmond was an old schooner, having been built here by Calkins in 1855. She was rebuilt in 1866, and received extensive repairs in 1872.

The model for the iron steamer to be built by the Globe Iron Works Company for Hanna & Company is finished and shows some improvement about the stern over the boats recently launched at their yard. The new steamer will be 268 feet keel, 286 feet over all, 39 feet beam and 24 feet depth, and will carry a water bottom similar to that in the Spokane. The machinery, the drawings for which are yet incomplete, will be triple expansion, the first on the lakes, and calculated to develop a speed of about eleven miles an hour, the ship having a cargo of 2500 tons. This is one of the steamers announced in the MARINE RECORD last winter. She will carry ore on owners account.

The propeller Onoko rrrived in port Monday with 2500 tons of ore. She clears light for Duluth to load grain for Buffalo, at 3¾c. The Onoko, under command of Captain Trinter, with Engineer O. N. Steel at the machinery, has been doing excellent service this season. On her first trip, Chicago to Buffalo, she brought down 100,000 bushels of wheat. She has made five trips light to Duluth, bringing down about 90,000 bushels of grain to Buffalo each time; one trip from Buffalo to Chicago with 2873 tons of coal, bringing down 2700 tons of Escanaba ore to Cleveland, and two trips light to Ashland, with ore back each time, making five grain cargoes, three ore cargoes and one cargo of coal, and seven up trips light.

The city fire tug was launched at Messrs. Murphy & Root's shipyard yesterday, the usual number of people witnessing the event, including Chief Dickinson and the members of the board of fire commissioners. The tug was canted over on her side and took water without a jar. She is 80 feet over all, 62 feet keel, 23 feet beam and 10 feet depth of hold, and fully sustains the reputation of her builders. The engine built by the contractors, the Excelsior Iron Works, Messrs. Stovering & Fleming, of this city, is 18x20. The boilers and pumps are not yet set. The new boat will be towed around by the company's works on Columbus street and be pushed to completion as rapidly as possible, as she is now behind the contract time. She will have a large boiler and pumping power sufficient to throw twelve 2½-inch streams, equal to six steamers. To the RECORD is due the credit of directing the attention of the officials of Cleveland to the need of a fire boat on the river for the protection of the vast interests concerned, and we have labored to that end without ceasing. A prominent member of the department said at the launch: "The fire boat is a result of educated public sentiment through the mediumship of the newspapers. The bublic have learned day after day for years why the department should have a fire boat. Through their instrumentality public meetings have been held, petitions sent to the council and the board, and arguments presented showing the usefulness of the craft. Mark the result. It has taken time, but here is the boat."

BUFFALO.

The Canadian propeller Pratt came in light and went into the Union drydock for a new wheel.

Mr. Ed. Suckow, mechanical engineer, and inventor of a valuable marine jack, has taken his departure for the Panama canal where his talent will be sorely tried if, by his assistance, they expect to bring the work into favor.

The survey of the wrecked schooner O. M. Bond has been concluded and the result figured up as follows: Damage to hull, $2,608; to rigging, $1,719; to outfit, $648.19; total, $4,975.19. The Bond will probably be repaired here in order to complete her trip with her cargo of coal.

CHICAGO.

Special to the Marine Record.

The handsome excursion steamer Cyclone, Captain S. L. Brown, arrived here from Cleveland Monday evening. She averaged twelve miles per hour on her trip up. She will carry two hundred passengers, and commences on her route between Chicago and Cheltenham Beach Wednesday. We hope she will bocome a favorite with the excursion people.

The steamship Siberia, Captain W. W. Morse, with iron ore from Ashland, arrived off Chicago with her consorts the Bloom and Plymouth early Saturday morning. She left her consorts at this port to unload, and went on to South Chicago to unload.

Captain John Prindiville returned from Port Huron Saturday night, where he sold the steamer A. J. Wright to Messrs. Botsford, Jex and others for $11,500.

The steambarge Rhoda Emily and consort the Guiding Star were chartered on Monday, to go to Marquette and load iron ore for Ohio ports at $1.25 per ton. This is considered one of the best charters this season.

The steamship Albany, Captain Frank Williams, arrived Sunday with a cargo of merchandise from Buffalo, on her ninth round trip this season.

At the Chicago Drydock Company's yard the steambarge Escanaba was in dock for calking. She also received a new mizzen mast; the schooner W. H. Dunham and tugs W. H. Wood and Brothers were in for calking; the steambarge Fayette for fixing stern bearing, calking and general repairs; the steam canal boat Montauk received some new beam and ceiling; the schooner Andrew Jackson new cross trees; the schooner Ellen Williams had her center board box calked; the steambarge Lincoln, barge Gibraltar, propeller Hiawatha and schooner White Star received some plank in their sides; the schooner Minnie Mueller a new main topmast.

At Miller Brothers' Drydocks the schooner Carrier was in dock to have leaks stopped; tug Rebel and scow Laura Johnson to have leaks stopped; the schooner O. Shaw, tug Crawford, schooners Eveline and City of Chicago were in for calking; tug Mary McLane to have her shoe fixed; one of Tetley's sand scows for calking; the schooner J. G. Masten received a new topmast; schooner Clara a new jibboom.

The launching of the new fire tug Geyser at Miller Brothers' shipyard last Thursday afternoon was a great success, and a large number of the leading men of our city were present. After the ceremony of christening had been done by the breaking of a bottle of champagne across the bow of the boat by little Miss Pearl Miller, daughter of Mr. Thomas Miller, one of the builders, the boat glided off the ways gracefully into the water. Then speeches were made by Mayor Harrison, Fire Marshal Swenie and others, in praise of the boat and the purposes for which she was to be used, after which a goodly number of the visitors partook of the wine, beer and cigars which had been plentifully supplied for the occasion. The cost of the boat when completed will be about $35,000. She is 105 feet in length, 23 feet beam, and 9 feet depth of hold, and will be furnished with two 18x20 propelling engines. She will be able to throw one four-inch stream 400 feet, two three-inch streams 400 feet, eight two-inch streams 200 feet, or fourteen one and one half-inch streams 200 feet. Her station will be at the Throop street bridge, and in the department she will be known as Engine Company No. 37. The present crew of the Alpha, consisting of twelve men, under command of Captain Cowan, will be transferred to the Geyser.

The steambarge Lincoln of St. Catherines, Captain Duncanson, and her consort the Lisgar, loaded wheat Wednesday for Kingston, at a 4½ cent freight.

Grain freights are firm at 3 cents on wheat and 2¾ cents on corn to Buffalo, with a tendency to go up, in consequence of the good freights now offering for iron ore.

The barge Plymouth went into drydock Wednesday morning to have a leak stopped which commenced while her load of iron ore was being unloaded.

Tuesday morning just after bridge hour as the schooner Alva Bradley was going up the south branch of the river, in tow of the tugs Parker and Bob Teed, the steambarge Susie Chipman, also going up the river, in her hurry to get by, collided with her in the port draw of Main street bridge and smashed about fifteen stanchions and a portion of her rail just forward of the mizzen rigging on the port side.

On Saturday the Marinette barge line of Chicago sold the barge Marinette to the Oscoda Salt and Lumber Company for $12,500. The Marinette was at once chartered for a cargo of grain to Midland and will hereafter go as a consort to the propeller John Otis. It is reported that the Marinette people intend disposing of their entire fleet, consisting of the propeller J. C. Perrett and fourteen barges.

Owing to the libeling of the propeller Burlington recently, and her consequent tying up here, her three consorts, the Gray Oak, Wyandotte, and Iscman, have been detained in port, unable to get away. A proposition was made to Captain McLaughlin, owner of the tug Gordon, to take the tow, and he accepted. The barges go to Detour, and will be brought back by the Gordon. The tug was selected for the trip on account of her good qualities. One thousand dollars is the price paid for the trip.

The propeller Armenia, which cleared from here Friday night, took fifty passengers for Montreal, from Missouri, Kansas, and Nebraska. They were all excursionists, armed with return tickets.

The government steamboat inspectors revoked the passenger license of the steamer Daisy Day, and issued her a certificate which permits her to carry nothing but freight. The steamer measures 146 tons, and was built in 1880. She formerly hailed from Chicago, but changed owners last spring, and has since been employed in carrying lumber and a limited number of passengers between Little Point Au Sable, and Chicago. Her last license, which was issued by ex-Inspector Warren, allowed her thirty passengers. This expired and when Captain Sinclair reinspected the boat he pronounced her unfit for the passenger trade and annulled her passenger permit. This action was based on the fact that her bulkheads are not water tight, there being an open space of eight inches between the top of the forward bulkhead and the deck beam.

The Miller Brothers are rebuilding the schooner Moselle. She will hereafter be known as the Harry Channon, in honor of our well known Chicago ship chandler.

Soon after leaving port last Saturday the schooner Clara carried away her jibboom in a squall. She returned to port and received a new one at Miller Brothers.

WILLIAMS.

ERIE.

Early in the season several of the Anchor line vessels ran aground while trying to get out of the bay. The Anchor line agent complained to the collector of customs that a bar was forming at the channel. Carl F. Palfrey, captain of engineers, was notified and he spent ten days taking soundings. He has notified the collector that there is no bar, but that the buoys were not set in the right place and thereby mislead the vessel captains, hence the trouble. The inspector of lighthouses has been notified.

DULUTH.

Captain Baker, of the revenue cutter Andy Johnson, says he has no authority to investigate the reports of the robberies of bodies from the wrecked steamer Algoma by the fishermen of Isle Royal, but will visit the island while cruising on Lake Superior and made inquiries about the reports·

MARITIME LAW.

COLLISION—SCHOONER UNDER SAIL AND SCHOONER IN TOW—ERROR IN LOCATING VESSELS BY SOUND—CHANGE OF COURSE IN FOG—LIGHTED TORCH.

District Court, S. D. New York. June 15, 1886.

[*Continued from last week.*]

In the case of the Pennsylvania, 19 Wall 125, the supreme court said that what is moderate speed "may not be precisely defi nable. It must depend upon the circum stances of each case. That may be moderate and reasonable in some circumstances which would be quite immoderate in others. But the purpose of the requirement being to guard against danger of collisions, very plainly the speed should be reduced as the risk of vessels is increased. In the case of the Europa, Jenkins, Rule of the Road at Sea, 52, it was said by the privy council: 'This may be safely laid down as a rule on all occasions, fog or clear, light or dark, that no steamer has a right to navigate at such a rate that it is impossible for her to prevent damage, taking all precautions at the moment she sees danger to be possible; and if she cannot do that without going less than five knots an hour, then she is bound to go at less than five knots an hour. * * * '" "And," says the court further, "even if it were true that such a rate [speaking of seven miles an hour] was necessary for safe steerage, it would not justify driving the steamer through so dense a fog, along a route so much frequented, and when the probability of encountering other vessels was so great. It would rather have been her duty to lay to."

In the case of the Western Metropolis, 7 Blatchf. 214, Woodruff, J., held that if the night was either so dark or so foggy that, by slowing, stopping, and backing as soon as the schooner was observed, the collision could not be avoided, then the steamer was moving at too great speed.

The case of the Eleanora, 17 Blatchf. 88, is directly in point upon this question. There, as appears by the opinion of Judge Blatchford, then judge of the district court, (pages 91, 92) the steamer, when the fog was very dense, came on, reduced her speed to five and a half miles an hour. The master, first mate, two seamen, and a lookout were listening attentively for sounds of fog horns and looking attentively for lights. Neither the steamer nor the vessel collided with became conscious of the presence of the other until just before the collision. Judge Blatchford said:

"If the steamer had been going at less speed, or had gone ahead a short distance, and then stopped still and listened, and thus made her speed, or her passage from point to point through the intervening space, and not merely her running rate while in forward motion, that 'moderate speed' which the statute requires, it is quite apparent that, blowing her whistle continually, at proper intervals, the blast would have been heard by the schooner, and answered by the fog horn over the starboard side of the schooner, in sufficient season for the steamer to have stopped and backed, and be brought to a stand still, before reaching the schooner. Therefore the steamer was in fault as to her speed.

This view was approved on appeal by Mr. Chief Justice Waite, who said:

"A simple slackening of speed by a steamer in a fog is not always enough. She must run at a moderate speed, and is never justified in coming in collision with another vessel, if it be possible to avoid it. This implies such a speed only as is consistent with the utmost caution. Having complete control of herself, and being capable of so much damage if a collision does take place, the law has imposed on her the obligation of so directing her own movements, in the midst of the uncertainties of a fog at sea, as to be at all times under easy command. If she fails in this, she must suffer the consequences. Her rate of speed must be graduated according to the circumstances. The more dense the fog, the greater the necessity for moderation. The object is to keep her, if possible, under such control that she can be stopped after another vessel, with which she is in danger of collision, may be seen, or otherwise discovered."

This case in many of its material facts is remarkably similar to that at bar with respect to both the speed of the steamer and the duty of the schooner to display a torch light, and may well be considered authoritative upon the questions decided.

2. Was the Mott in fault? The testimony shows, in the first place, that she was sufficiently manned, and that the measures which were taken by the master for her safe navigation were such as good seamanship prompted. When he came on deck at 11:30, which was at least 45 minutes before the collision, he took a position on the roof of the cabin, and, after the necessary observations, and before the Oregon's whistle was heard, he directed the watch below to be called to shorten sail. The mizzen sail was reefed, and the light sails were clewed up. All hands were on deck, and were engaged in this work, except the mate, wheelsman and lookout, who were at their respective posts of duty. The master says he ordered this to be done so that fog whistles might be more plainly heard and sounds located. He further testifies that he took the bearings of every whistle of the Oregon, and that when he heard the first whistle it bore south, of the Mott. The next appeared to bear a little west of south, and another southwest by west from the Mott, two or two and one-half points abaft of her beam. In this he is corroborated by others of the crew, who heard the whistle, and noticed its bearings, but probably not with the care of the master. He says he concluded the steamer was going west, and astern of his vessel, and that therefore it was safe for the Mott to keep her course. Although the courses and distances of sound in such circumstances are apt to be misleading, from the best evidence the master had of the location of the steamer, and with the care he exercised, I think he was justified in continuing on his course. Erroneously locating a vessel by the sound of her whistle in a fog is not necessarily a fault. The Lepanto, 21 Fed. Rep. 656.

Lights could not be seen. The master had to be guided by sound His vessel was on the starboard tack, and the circumstances might well lead him to the conclusion that a change of course would increase the hazard. The Mott was going at a moderate rate of speed, and as soon as the master knew of the immediate proximity of the steamer, and perceived that a collision was imminent, he put the wheel of his vessel down, and luffed her up into the wind. Upon the liability to mistake, and the possible causes of mistake, in locating a vessel by the sound of the fog signals, see the very interesting opinion of Judge Brown, of the Southern district of New York, in the case of the Lepanto, *supra*.

Upon a careful examination of the evidence, I am convinced that there was no neglect on the part of the lookout of the Mott in the use of the fog horn. Before the master came on deck, and from the time the fog came on, the horn was sufficiently sounded. The lookout stood forward on the starboard side. It is true that the mate and lookout, before the watch below were called, took in the jib topsail and fore gaff topsail, but this was at about 11:30 o'clock, and before the whistle of the Oregon was heard; and, according to the testimony, the lookout was thus engaged only two or three minutes, and the work did not call him but a few feet away from the place on deck which he occupied as lookout. When the whistle of the Oregon was first heard the master says he directed the lookout to blow long and distinct blasts, and that this was done. The second mate and the lookout went out on the jibboom, and furled the jib topsail while others of the crew were doing other work on deck, but during this time the mate had the horn, and continued the blasts at short and regular intervals. This was about 12 o'clock, and a careful review of the evidence satisfied me that there was no want of diligence in the use of the horn from the time the fog came on, soon after 10 o'clock, down to the time of the collision.

The Mott did not show a torch light, and, under the decisions, this, I think, was a fault which throws upon her a share of the responsibility for the collision. Section 4234 of the Revised Statutes provides that every sail vessel "shall, on the approach of any steam vessel during the night time, show a lighted torch upon that point or quarter to which such steam vessels shall be approaching." It is only where it clearly appears that the exhibition of a torch light could not have served any useful purpose, or given any additional information as to the position or course of a sailing vessel, that the omission to comply with this section can be held to be immaterial. The Margaret, 3 Fed. Rep. 870; the Leopard, 2 Low. 241; Kennedy v. the Sarmatian, 2 Fed. Rep. 911. If it is doubtful whether the exhibition of a torch light would or would not have conveyed information to the steamer for avoiding a collision, then the doubt must be resolved against the vessel which failed to comply with the statutory requirement. I cannot find as a fact in this case that a torch shown by the Mott would not have been seen by those on board the Oregon; and for this reason, if for no other, I must find the Mott guilty of contributory fault. The Crawford, 6 Fed. Rep. 911; the Excelsior, 12 Fed. Rep. 203.

The witnesses differ as to the distance a light could be seen on the occasion in question. The second mate of the Mott says the lights of the steamer could not be seen plainly 200 feet away. The lookout says a torch light could not have been seen through fog more than the distance of a vessel's length. The master places the distance at 100 feet. The master of the Oregon thinks it might have loomed up 500 feet off. The master of the Mott knew, from the repeated whistles, that there was a steamer in the neighborhood. He could not locate her, but he had occasion to know that it was possible she might be near by, although the sound of her signals indicated that she was going off to westward. It was an occasion for the greatest precaution.

In the case of the Eleanora, *supra*, the schooner had her colored lights set and burning, but Judge Blatchford found as a fact that they were not seen at any time from the steamer, nor could they, or the lights of the steamer, have been seen, in such a fog as prevailed, at any useful distance. The master of the schooner came on deck very shortly before the collision. The persons on deck were listening and looking. They had a fog horn, and it was being blown at proper intervals. In the opinion of the court, Mr. Chief Justice Waite said that the schooner "was sailing in what she knew, or ought to have known, was a common thoroughfare of approaching steam vessels at the time. Their fog signals were heard from various directions, and she was heading on a course crossing their regular tracks. The statutory rule is imperative. * * * No sailing vessel has a right to disregard this regulation because she thinks it unimportant. If she knows of the approach of a steam vessel, she must exhibit the light, or take the risks of loss occasioned by its absence. * * * If exhibited, possibly the the torch might not have been seen far enough away to have done any good, but such a possibility furnishes no excuse to the vessel for its absence. Nothing short of an absolute certainty that it could do no good, to be established by proof on the trial, will justify an omission to obey the rule. In a fog, all vessels must do all that is required of them by law or usage. While more is demanded of a steamer than a sailing vessel, it is as important that the sailing vessel should obey the rule prescribed for her as that the steamer should not neglect those which are to govern her. Actual safety is depen dent upon a strict performance by each of all their respective duties. * * * It was not proper to assume that the torch-light would have done no good. It was her duty to exhibit such a signal, and, under the circumstances of the case I cannot but consider it a fault that she omitted to do so."

Applying to the case in hand the rule thus laid down, the conclusion must be that the Mott cannot be exonerated from fault in the respect named.

As the Oregon and the Mott are both found to have been in fault, let there be a decree dividing the damages.

OFFICIAL NUMBERS AND SIGNAL LETTERS.

TREASURY DEPARTMENT, BUREAU OF NAVIGATION, WASHINGTON, July 26, 1886

To the Editor of the Marine Record:

Following is a list of merchant vessels of the United States to which official numbers and signal letters were assigned by the Bureau of Navigation, Treasury Department, during the week ended July 24, 1886:

Official Number.	Signal Letters.	Rig.	Name of Vessel.	Tonnage. Gross.	Tonnage. Net.	Home Port.
			SAIL VESSELS.			
106,430		Sc.	Abbie Dees,	89.99	85 50	Lake Charles, La.
126,367		Sc.	Cleopatra,	11.18	10 63	San Francisco, Cal
135,891		Sl.	Egbert,	7 66	7.28	Warren, R. I.
120.646		Lug.	Free Press,	....	5 15	Brashe, La.
85 931		Sc.	George H. Davenport,	57 36	54 50	Columbia Falls, Me.
140,833		Sc.	Louisa,	6 99	6 64	Charleston, S. C.
91.854		Cat.	Mabel,	6 49	6.17	Camden, N. J.
110,704		Sl.	Rebecca T. Ruark,	10.51	9 98	Cambridge, Me.
116,110		Sc.	Susan E. Peck,	1399.40	1361.22	Detroit, Mich.
81.121		Sc.	Whistler,	5 84	5 55	Barnstable, Mass.
27.629		Sl.	Yolande,	9.77	9 28	Boothbay, Me.
			STEAM VESSELS.			
106.427		St. s.	Anna L Sloan,	17.39	9 79	Buffalo, N. Y.
106,428		St. p.	Al Martin,	96.68	96 68	Cincinnati, O.
107,429		St. yt.	Anna F. Onen,	....	35 32	Youngstown, N. Y.
157,177		St. p.	Diana.	31.96	31.96	Evansville, Ind.
120 647		St. p.	Frankie Folsom,	37.48	36 00	St Paul, Minn.
120,648		St. s.	Fannie,	220.01	133 36	Wilmington, Del.
95,882		St. yt.	Hinda,	58.58	34 90	New York, N. Y.
140,832		St. s.	LeRoy,	7.50	6.00	St Paul Minn.
136 354		St p.	Nantucket,	629 03	468 51	New Bedford, Mass.
150,375		St. s.	Portsmouth,	214.36	107.18	Wilmington, Del.
110.703		St p.	R. E. Phillips,	84 06	79 60	Wheeling, W. Va.
28,107		St s	Zingara,	22 14	13 45	New York, N. Y.
			UNRIGG'D VESSELS.			
34,152		Bge.	Chemist,	132.36	125.75	New York, N Y.
46.365		Bge.	Joe,	....	74.11	LaCrosse, Wis.
53.245		Bge.	Omaha,	289 66	289 66	New York, N. Y.

JARVIS PATTEN, Commissioner of Navigation.

LITERARY NOTICES.

THE AUGUST CENTURY.—In keeping with the season, the "Midsummer holiday" Century is noticeable for richly illustrated articles and fiction. Of the former, the opening paper is an entertaining description of "Algiers and its Suburbs." A sketch portrait of John Burroughs is the frontispiece of the number, and Miss Edith M. Thomas contributes a short paper on "John Burroughs and his Last Two Books." Charles G. Leland gives the romance of "A Gipsy Beauty," the famous Charlotte Cooper, whose portrait by Leslie is reproduced in a full-page engraving. In the seventh part of "The Minister's Charge" Mr. Howells reveals his country hero, Lemuel Barker, troubled with a sense of doing menial service and anxious to be understood as not engaged to Statira. In the war series, "The Battle of Fredericksburg" gives scope for varied and stirring illustration. General James Longstreet contributes the title paper and the Confederate view. The Union assaults upon the memorable stone wall are described by General Darius N. Couch, who was virtually in command on the field of "Sumner's 'Right Grand Division;'" General William F. Smith writes anecdotally of the part taken by "Franklin's 'Left Grand Division,'" There are five full-page pictures among the thirty-four war illustrations of the number. Dr. Washington Gladden writes of the question, "Is it Peace or War?" as regards the relations of capital and labor.

ST. NICHOLAS FOR AUGUST goes out of doors to seek congenial topics for its readers, who are spending their vacations by the sea, among the mountains or in country homes. The frontispiece, by Mary Hallock Foote, gives us a bright glimpse of child-life at the seaside, while the opening article, "A Rocky Mountain Hermit," by Alfred Terry Bacon, is a delightful account of a Robinson Crusoe summer spent among the birds, the beasts and the mountains of Wyoming. Ripley Hitchcock, who wrote last month about "Fly-fishing for Trout," contributes in "A Royal Fish," a description of the methods and the joys of salmon fishing. A new and original outdoor game, called "Regatta," is described by Frank Bellew. In spite of its nautical name, it is played ashore, though it has a strong sea flavor. The "Work and Play" department is also of an amphibious character this month, and contains "A Rope Yarn, spun by an Old Sailor," C. W. Miller, who describes some of the most useful knots and splices employed by mariners, but applicable to terrestrial purposes. Of the serials, "Little Lord Fauntleroy," is continued in an installment in which the plot against the hero is still further developed. Rose Lattimore Alling carries "Nan's Revolt" forward in two clever chapters. "The Kelp-gatherers" find strange things cast up by the sea. Horace E. Scudder takes "George Washington" through the year 1783.

A MODEL YACHT TO BE BUILT.

The recent narrow escape of the crew of the yacht Arrow makes the building of safe yachts an important consideration to the lovers of yachting in this city. Captain D. P. Dobbins has for some time been preparing plans for the building of a yacht for some young men, relatives and acquaintances of his, who wished to rely on his knowledge of marine architecture to secure for them a boat which would combine speed with safety. This Captain Dobbins intends to do, and if his present plans are carried out he will have a model yacht. The plans are all ready except the model, which will not be selected until after the great yacht race soon to be held in the east. The captain has a strong liking for the model of the Puritan, which is neither a "skimming-dish" like the Alarm, of the Buffalo Yacht Club, nor a deep-keel boat like the Genesta, but combining the best points of the two classes. The new boat will be built of such a size as to enter the first class in the yacht club, her length being 30 feet and her beam 8 feet. She will have a regular cutter-rigging, with main sail, forestaysail and jib, gaff topsail, jib topsail, and spinnaker. The pattern of the Dobbins lifeboat will be adopted to a certain extent in the yacht. It will be double-decked, the space below the water line deck being made solid with Lake Superior cork pine, a dry deck, as it is called, being built several inches above this. The principal peculiarity about her construction will be this solid bottom below the water line, and the insertion of two steel concave sliding keels running through an extra heavy oak standing keel. These keels will be worked by gearing, under the control of the man at the helm, who can handle both easily. A steel centerboard will also be placed in her, but this will be taken out of her when she sails in races, the concave keels being relied upon to steady her. The ballast, if any may be needed, will consist of lead bolted to the bottom of the standing keel. For racing purposes a large slab of lead running on a carriage and under control of the man at the helm will be placed between the two decks, connection being had with it by the use of gearing.

The boat is to be air-cased all around the wainscoting of the cockpit and cabin, the same as in the lifeboats, double and perfectly air-tight compartments being divided by air-tight bulkheads in such a way as to give her a series of air-cases, completely encircling her, preventing her from capsizing or sinking if crushed. In addition she will have from her drydeck waste port scuppers through the side to free the cockpit or cabin from any water that may be shipped. The idea in building her in that way is so that she cannot be sunk by any staving, bilging, or leakage. These air-chambers, added to the heavy solid bottom and the ballast weighing the reverse way, are what are depended upon to give her stability and prevent her from capsizing. Messrs. Hingston & Son will build the boat as soon as the plans are ready —*Buffalo Express*.

CHANGE OF DESTINATION.

TREASURY DEPARTMENT, June 5, 1886.

Sir: Your letter of the 2d instant was received, reporting that the enrelled and licensed vessel Geo. T. Hope of Buffalo, cleared at Ashland, district of Superior, with a cargo of iron ore for Cleveland, but, in accordance with orders received while passing Detroit, changed her destination and proceeded to your port.

You desire to be informed whether any penalty has been incurred by reason of such change in the destination of the vessel.

In reply, the following telegram was sent to you: "Allow vessel 'Geo. T. Hope,' to enter at your port as it she had cleared from Ashland therefor, on payment of cost of telegram."

For your more complete information, I will add that no penalty was incurred by reason of the fact the vessel while on the voyage changed her port of destination from Cleveland to Erie.

To COLLECTOR OF CUSTOMS, Erie, Pa.

A NEW SHIP RAILWAY.

The variety and extent of the misinformation which the people of Great Britain manage to acquire about this country is a standing marval to Canadians. Take, for instance, the following paragraph, which appears in the editorial columns of one of the leading papers of Ireland, the Dublin Express, in its issue of the 12th inst.:

"The Canadian Pacific Railway is to be turned to account in a remarkable manner for bringing tea here from Japan. The long sea voyage, which always tended to deteriorate the tea, will be shortened by the lifting of the vessel on the Canadian Railway at Vancouver, and transporting it on railway trucks to the Atlantic. The second vessel to be so dealt with left Yokohama on Saturday."

The idea that the loading of a four thousand ton steamer and cargo upon a railway car, and the hauling of them across the Rocky Mountains from Vancouver to Montreal, would be a better plan than to unload the cargo and forward it by the railway, leaving the steamer behind to go back for another lot, might seem reasonable enough to the editor of the Dublin paper, who is presumably an Irishman; but we are surprised that it did not occur to him that there might be some trouble about the masts and smokestack of the vessel when they came to get her through a tunnel.—*Port Arthur Sentinel*.

MURPHY & ROOT,

Shipbuilders AND Contractors

GENERAL REPAIRING.

Yard, Old River Bed, ft of St. Paul st.,

CLEVELAND, O. Besidence 150 Harbor street.

WM. H. RADCLIFFE,

Shipbuilder and General Repairing.

OLD RIVER BED, Ft. OF TAYLOR St.,

CLEVELAND. O.

PRESLEY & CO.,

Globe Drydock

Shipbuilding, Drydocking, Repairing and Spar Making.

CLEVELAND, OHIO.

M. T. COUGHLIN,

MANUFACTURER OF AND DEALER IN

Oils & Engineers' Supplies

AND

COUGHLIN'S CHALLENGE COMPOUND,

TO REMOVE AND PREVENT INCRUSTATION IN STEAM BOILERS, WHICH IT IS GUARANTEED TO DO.

49 North Market-st., Chicago.

DAVID BARNHISEL, Agent.

DOMESTIC & STEAM COAL

Cleveland. Ohio

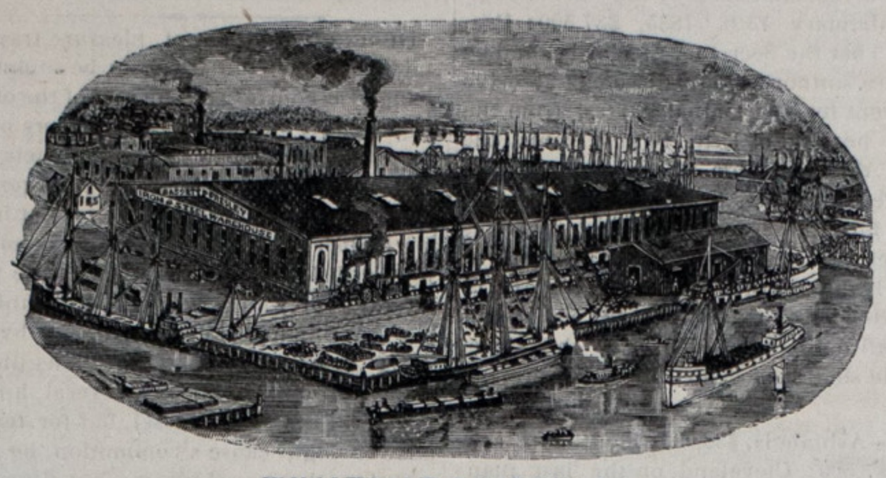
WANTED An active Man or Woman in every county to sell our goods. Salary $75 per month and expenses. Canvassin outfit and particulars FREE. STANARD SILVER-WARE Co., Boston, Mass.

IRA B. BASSETT. GEORGE PRESLEY, Jr.

BASSETT & PRESLEY,

[Successors to W. H. McCurdy & Co.]

Office and Warehouse, cor. Elm & Hemlock Streets, Cleveland, O.



WHOLESALE DEALERS IN

BAR, BOILER, HOOP, ANGLE AND SHEET IRON.

Nails, Railroad and Boat Spikes, Boiler, Tank and Cooper Rivets, Swedes Iron, Boiler Tubes, Nail Rods, Etc., Etc., Etc.

We Represent in this Market the Following Well-known Manufacturers:

Andrews Bros. & Co.....Youngstown, O.
BAR IRON AND POLISHED SHAFTING.

Reading Iron Works.....Philadelphia, Pa.
BOILER TUBES.

Central Iron Works.....Harrisburg, Pa.
BOILER PLATES.

Lindsay & McCutcheon,.....Pittsburg, Pa,
HOOP, BAND & STAR HORSESHOE IRON.

George W. Johnson,.....Newcastle, Pa.
TANK SHEET IRON.

Dilworth, Porter & Co., Limited..Pittsburg, Pa.
RAILROAD AND BOAT SPIKE.

Hoopes & Townsend,.....Philadelphia, Pa.
BOILER AND TANK RIVETS.

Sanderson Bros. Steel Co,.....Syracuse, N. Y.
CAST STEEL.

Joseph Corns & Sons ....Massillon, O.
CROWN STAY BOLT IRON.

Pencoyd Iron Works,.....Philadelphia, Pa.
ANGLE IRON.

A Complete Stock of all above Goods in Our Warehouse.

TELEPHONE 1447. ESTABLISHED IN 1854

JAMES MAGNER & CO.,

PROVISION DEALERS,

The Vessel Trade a Specialty.

227, 229 & 231 Dearborn & 30 & 32 Quincy-st

OPPOSITE CUSTOM HOUSE,

CHICAGO, ILL

JAMES MAGNER. R. Z. WINSLOW.

VESSELS WANTED OR FOR SALE.

WANTED.

STEAM YACHT OR TUG.

Fifty to 60 feet long. Must make 12 miles per hour and be cheap. Address full particulars to
N. H. MELOCHE,
34 Fort Street, West Detroit, Mich.

STEAMBARGE FOR SALE.

This is one of the finest steambarges on the lakes, and was built in 1884. She is in good condition in every respect, serviceable, easy to load and unload, and a great favorite. She can not be duplicated for the same money. Her dimensions are 131 feet keel, 143 feet over all, 23.4 feet beam, 8.4 feet depth of hold, and is classed A1½ by Inland Lloyds. She carries two masts. Her carrying capacity is 400 to 425 tons or 14,000 bushels of wheat, or about 240,000 feet of lumber on a dratt of 9 feet 9 inches. Her engine is high pressure 18x20 and her boiler 6½x12 feet of 7-16 Otis steel. Speed 10 miles loaded or 11½ light.
Address MARINE RECORD, Cleveland, Ohio.

FOR SALE.

STEAM PASSENGER TUG TEMPEST.

Steel hull 60 feet over all, 10 feet beam, 6 feet hold. Engines fore and aft compound, 8 and 14x12. Otis steel boiler, return flue, 110 pressure. Complete passenger outfit for forty-three passengers. Speed 12 to 16 miles. H. F. LOOMIS, 151 Arlington-st, Cleveland.

A1 TUG FOR SALE.

This tug is 52 feet over all, 13 feet 3 inches beam, and 6 feet 6 inches depth of hold. Engine, 13x14; steel boiler 4 feet 6 inches diameter by 9 feet long. The hull was built by Geo. H. Notter, Buffalo, and is an excellent model and well built. The tug is nearly new, having done only five month's work since she came out new last summer. She has a poop deck and finished cabin fore and aft, and classes A1. Price, $4,300. Address MARINE RECORD OFFICE.

FOR SALE,

New Iron Tug.

Dimensions 78 feet long, 17 feet beam, 11 feet deep; draft, 9 1-2 feet; engine, 20x20, new steel boiler 7 feet in diameter, 13 feet long, allowed 112 pounds steam. Three iron breast hooks forward, collision bulkhead forward, water tight bulkhead forward of boiler; iron coal bunkers, water tight bulkhead aft at shaft-gland, with water tight iron deck forming the floor of after cabin. Iron decks, bulwarks and deck houses; iron tow posts aft. Heavy angle iron frames, with reverse bars on alternate frames; ⅜ plate, steel floor plates; boiler, engine and bearing foundation of iron. For sale cheap

GLOBE SHIPBUILDING CO.

SCOTT'S NEW COAST PILOT

IS SOLD BY

SHIP CHANDLERS

AND BY THE PUBLISHER,

GEORGE SCOTT,

AT 162 LARNED ST., E., DETROIT, MICH.

R. W. ABRAM,

Wholesale and Retail Dealer in

FRESH AND SALT MEATS.

NO. 544 DETROIT ST., CLEVELAND, O.

Vessel Orders Promptly Filled.

SPIEGLE BROS.

MARINE SUPPLY STORE

WHOLESALE AND RETAIL

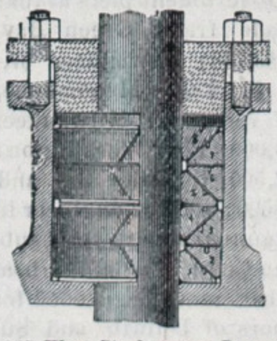
Grocers, Bakers and Ship Supplies;

Fresh & Salt Meat of all Kind.

30 & 32 River-st., opposite Detroit Steam boat Landing, and 184 Broadway. Telephone 112,

CLEVELAND, OHIO.

KATZENSTEIN'S



SELF-ACTING METAL PACKING

FOR PISTON RODS, VALVE STEMS, Etc.

Adopted and in use by the principal Iron Works and Steamship Companies within the last eight years in this and Foreign countries. Also flexible tubular metallic packing for slip-joints on steam pipes and for hydraulic pressure. For full particulars and references address

L KATZENSTEIN & CO
357 West St., between Leroy and Clarkson-st, N. Y.

CAPT. THOS. WILSON, who uses this packing on his Steamers, and THE MARINE RECORD are Agents for Cleveland and the Lakes.

LOANS

1 per cent to 4 per cent per annum;

Investments.

$3 will secure one BRUNSWICK 20-THALER BOND and one ITALIAN RED CROSS BOND, the next redemption of which soon takes place. Every Bond participates in FOUR REDEMPTION DRAWINGS annually—more than one chance to obtain a Premium $20,000 to $100,000. Bonds at all times worth their face value.

Remit $3 by Money Order, Draft, Registered Letter or Express. Balance payable in monthly instalments. U. S. Government Bonds sold on monthly payments.

Address for circulars, &c.,
G. W. FOSTER, Banker,
42 BROADWAY, NEW YORK.

Grummond's Mackinac Line

Stmr. Flora, W. E. Comer, Master, Leaves DETROIT every Tuesday at 9 p. m.

Stmr. Atlantic, J. R. Jones, Master, Leaves DETROIT every Saturday at 9 p. m.

STEAMER ATLANTIC

Leaves Cleveland every Friday evening at 9 o'clock. For Mackinac, St. Ignace, Cheboygan, Alpena, Oscoda and way ports For freight or passage apply to GEORGE ANDERSON, Agent, foot of Superior st., Cleveland, O. S. B. GRUMMOND, Owner.

TO MACKINAC.

Summer Tours.

Palace Steamers. Low Rates.

Four Trips per Week Between

DETROIT, MACKINAC ISLAND

St. Ignace, Cheboygan, Alpena, Harrisville, Oscoda, Sand Beach, Port Huron, St. Clair, Oakland House, Marine City.

Every Week Day Between

DETROIT AND CLEVELAND

Special Sunday Trips during July and August.

OUR ILLUSTRATED PAMPHLETS

Rates and Excursion Tickets will be furnished by your Ticket Agent, or address

C. D. WHITCOMB, Gen'l Pass. Agent,

Detroit & Cleveland Steam Nav. Co.

DETROIT, MICH.

T. F. NEWMAN, Pass. and Freight Agent.
A. J. JACKSON, Ticket Agent.
23 River street, Cleveland, Ohio.

LAKE SHORE & MICHIGAN SOUTHERN.

Commencing Sunday, May 30, 1886, at 5 o'clock p. m the time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	*2 55 A M	*3 05 A M
No 8, N Y, B & A Express	*8 25 A M	*8 50 A M
No 26, Elyria Accommodation	†7 45 A M	.....
No 24, Buffalo Ac'm via Sandusky	†10 30 A M	†10 45 A M
No 24, Toledo Accom via Norwalk	†10 30 A M	†10 45 A M
No. 10, New York & Boston Ex	*11 40 A M	*12 noon
No 12, N Y & B Fast Express	*2 10 P M	*2 45 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 40 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*12 15 A M	*12 25 A M
No. 23 Cleveland Express	*2 15 A M	
No 3, Chicago Express via " "	‡6 00 A M	6 30 A M
No 25, Mich Accom Norwalk	.....	†6 30 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	*10 45 A M	*10 50 A M
No 9, Chi Pac Ex via Norwalk	*5 15 P M	*6 40 P M
No 31, Elyria ac to Elyria only	.....	†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	.....

Sunday train for Nottingham—Depart 8:15 a. m, and 1:45 p. m.; returning, leave Nottingham at 8:50 a. m, and 3:45 p. m.

Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.

A local Cleveland and New York sleeper daily on No. 12, leaving Cleveland at 2.45 p. m.; arrive Grand Central depot, New York, 10.30 a. m.

For full information as to trains and counections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

The Nickel Plate!

NEW YORK, CHICAGO & ST. LOUIS RAILWAY.

The passenger equipment of this New Trunk Line is all new and is supplied with the latest appliances necessary to safe, speedy and comfortable travel.

Trains leave and arrive at the Union Depot, Van Buren street, Chicago, and N Y, L E & W R'y depot at Buffalo.

Following is the time in effect April 25, 1886, and until further notice:

EASTWARD.	Arrive.	Depart.
Buffalo Passenger	*10 40 A M	*10 45 A M
Chicago Passenger	*9 00 P M	.....
Local Freight	* 4 40 A M	* 5 45 P M
WESTWARD.	Arrive.	Depart.
Chicago Passenger	.....	*6 45 A M
Fostoria Pascenger	*4 46 P M	*4 51 P M
Local Freight	* 5 00 P M	* 5 50 P M

ROCKY RIVER ACCOMMODATION.
Depart—*7:40 a. m., *1:35 p. m.
EUCLID ACCOMMODATION.
Depart—*6 24 a. m., *9:10 a. m,. *5:05 p. m.
*Daily except Sunday.

Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of tickets desired. Baggage checked to destination

For information, call on nearest agent of the Company, or address
B. F. HORNER,
Gen'l Passenger Agent,

LEWIS WILLIAMS,
General Manager. Cleveland, O.

PURCHASE YOUR TICKETS VIA THE

BEE LINE--C. C. C. & I. R. R.

The Great Trunk Line to the South and West.

The only line from Cleveland with no change of cars to the Mississippi River. Solid trains and through sleepers to St. Louis, where direct connections are made in Union Depot for all points west.

Practically no change of cars to the

PACIFIC COAST.

The only line to COLUMBUS AND CINCINNATI with complete through train service, making direct connections in Union Depots for all points in the

SOUTH AND SOUTHEAST

Tourists Tickets to numerous points, including the

ROCKY MOUNTAINS.

Fast Express Trains Daily, New and Elegant Cars, A Perfect Roadbed.

☞ For low rates and any information pertaining to railway travel in general apply to CITY TICKET OFFICE, 173 SUPERIOR STREET, CLEVELAND, O.

D. JAY COLVER, Passenger Agent.
J. D. BROWN, Ticket Agent.
A. J. SMITH, General Passenger Agt.,

A BIG OFFER. To introduce them we will GIVE AWAY 1,000 Self Operating Washing-Machines. If you want one send us your name, P. O and express office at once. The National Co. 2 Dey St., N. Y.

FOR SALE CHEAP.

The powerful tug Robert Tarrant, 71 feet over all, 15 feet beam, 9 feet depth of hold. Engine 20x21, boiler 5¼x14, now carrying 100 lbs of steam, all in excellent condition. Address A. G. Rowell, 147 Rumsey street, Chicago, or at the Chicago Towing Company's Office, 210 South Water street, Chicago.

Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building] Cleveland, O.

A. A. POMEROY, EDITOR AND PROP'R

TERMS OF SUBSCRIPTION:

One year, postage paid.....$2.00
Six months, postage paid..... 1.00
Invariably in advance.

THE MARINE RECORD can be found for sale by the following news dealers:

CLEVELAND, O.—G. F. Bowman, corner of Pearl and Detroit Streets.

Evans & Van Epps, Superior street, Cleveland.

R. A. Castner, 254 Detroit street, Cleveland.

ASHTABULA HARBOR, O.—C. Large.

CHICAGO, ILL.—Joseph Gray. 9 West Randolph Street.,

CHICAGO, ILL.—August Semper. 345 Noble Street.

BUFFALO, N. Y.—Miss McCabe, Elk Street, near Ohio.

DETROIT, MICH.—N F. Stewart, Ft. of Woodward Av.

DULUTH, MINN.—C. F. Johnson, 117 West Superior Street.

MARQUETTE, MICH.—J. A. Vannier.

ESCANABA, MICH.—Wm. Godley.

PORT HURON, MICH.—G. H. Mann.

WASHBURN, WIS.—John A. Jacobs.

SARNIA, ONT.—D. McMasters.

ST. CLAIR FLATS, MICH.—McNiff & Son.

Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, OHIO, THURSDAY, AUGUST 5.

THE RIVER AND HARBOR BILL.

The conference committee on the river and harbor bill has reached an agreement and reported the bill favorably to each house, and it has passed both branches, the Senate without division and the house by a vote of 121 for to 98 against. The bill now requires but the signature of the President to become a law. As many of the objectionable features have been eliminated from the measure, amendments and riders attached to it in the Senate, we venture to say that President Cleveland will promptly approve it.

The neglect of the last Congress to provide funds for continuing the improvements of the navigable inland waters was, on the lakes, a very expensive derliction, as the force of the waves during fall and spring gales have destroyed much of the superstructure at various ports. The plan advocated early in the session of placing the expenditure of the several sums under the direction of a commission did not prevail, the matter being left entirely with the Secretary of War and under the direction of General John Newton, chief of engineers, U. S. A., but the secretary of war is directed to report to Congress at its next and each successive session, the name and place of each civilian engineer employed in the work of improving rivers and harbors, the time so employed and the place at and the work on which employed.

A good feature of the bill is that incorporated in section 3, providing that the Secretary of War shall report to Congress all cases in which peirs, breakwaters locks and dams and other structures built or made by the United States in aid of commerce or navigation are used occupied or injured by a corporation or individual; and that he shall report whether any bridges causways, or structures now erected or in process of erection do or will interfere with free and safe navigation.

In section 6 provision is made for examination, surveys and continguices and for incidental repairs for which no special appropriations are made for which purpose $75,000 are set aside.

The following sums are specified for improving and continuing improvements and repairs to works already in existence on the lakes and rivers tributary thereto.

New York—Buttermilk Channel, $56,250; breakwater at Rouse's Point, $15,000; Dunkirk, $15,000; Canarsie Bay, $7,500; Charlotte, $26,250. Flushing Bay, continuing improvement, $7,500; Gowanus Bay, $5,625; Great Sodus Bay, $16,875; Greenport, $3,750 Little Sodus Bay, $9,375; Oak Orchard, $9,375; Olcott, $7,500; Wilson, $7,500; Ogdensburg, $7,500; which together with the amount on hand, is to be used in removing obstructions from the mouth of the Oswegatchee and continuing the excavation at the lower harbor up stream. Oswego, $71,250, of which $56,250 to be used in repairs and $15,000 in continuing work on the harbor. Rondout, $1,875; Saugerties, $11,250; Sheepshead Bay, continuing improvement, $3,750.

Pennsylvania—Erie, continuing improvement, and also for the improvement of said harbor as recommended by the chief of engineers, January 13th, 1885, $37,500: Provided, That the Secretary of War be, and he is hereby, authorized and directed to receive and accept for the United States, from the marine hospital of Erie, Pennsylvania, the title to the peninsula of Presque Isle, at Erie, Pennsylvania, as tendered by the said marine hospital, agreeably to the provisions of an act of the legislature of the state of Pennsylvania approved May 11th, 1871: And provided further, that $22,500 of said sum shall not be expended until the aforesaid title shall be accepted by the Secretary of War.

Ohio—Ashtabula, $30,000; mouth of Black River, $7,500; Cleveland, on the last plan projected, $93,750; of which $30,000 are be used in building a parapet on the existing breakwater, and the $100,000; now on hand to be available for work on th last plan; Fairport, $18,750; Huron, $2,250; Muskingum River, $37,500; Port Clinton, $1,500; for the purpose of acquiring the title to the land adjoining the inner end of the west pier built by the United States for the improvement of the harbor at Port Clinton, the Secretary of War shall negotiate with the owner or owners of the land for the purchase thereof at a reasonable price, to be approved by Congress; and if an agreement as to price cannot be made with the owner, then the value of the same shall be ascertained in the mode provided by the laws of Ohio for the condemnation of lands for public uses in that state, the result of said proceedings of condemnation, if taken, to be reported to the next Congress for its approval. Sandusky City, by dredging the the channel through the outer bar and within the bay; and for this purpose the money appropriated by act of July 5th, 1884, now on hand, is made available, and the further sum of $2,812; is hereby appropriated. Toledo, continuing improvement of the Maumee River by a straight channel along such line as may be approved by the Secretary of War, $12,500; and the balance of the $25,000 hereafter appropriated are hereby made available for clearing the old channel. Vermillion, $2,250.

Indiana—Michigan City, $56,250; of which sum $1,875 are to be used on the inner harbor.

Illinois—Calumet, $7,500; Chicago, $75,000; Waukegan, $15,000.

Michigan—Charlevoix and entrance to Pine Lake, $7,500; Cheboygan, $11,250; Frankfort, by extension of piers and repairs, $5,250; Grand Haven, $30,000; Harbor of refuge at Grand Marias, $26,250; Ludington, $56,250; Manistee, $7,500; Marquette, $7,500; Monroe, $1,500; Muskegon, $9,375; Ontonagon, $9,750; Pentwater, $7,500; Portage Lake, $11,250; Harbor of refuge at Sand Beach, continuing improvement, $75,000; of which not exceeding $37,500 are to be used in repairs, St. Joseph, $7,500; Saugatuck, $6,000; South Haven, $3,750; White River, $7,500; Black Lake, $3,750.

Wisconsin—Ahnapee, $11,250; but no part of said sum is to be expended until the wharfage over the Government piers at that port shall be made free. Green Bay, $5,250; Kenosha, $3,750; Kewaunee, $7,500; Manitowoc, $11,250; Menomonee, $2,250; Harbor of refuge at Milwaukee, $60,000; Oconto, $6,000; Port Washington; $3,750; Racine, $7,500; Superior Bay and St. Louis Bay, $22,500; and the engineer in charge, in his next annual report, shall submit an estimate of the cost of a dredge boat or other facilities that may be needed for dredging the harbors of Duluth and Superior; $13,500 of the money hereby appropriated is to be expended in dredging in said Superior bay and harbor, and in repairing piers at natural entry and $9,000 in dredging St. Louis Bay, along the dock line on the Wisconsin shore, from deep water at Connor's Point towards deep water at Grassy Point. Sheboygan, $11,250; Sturgeon Bay, $3,750; Ashland, $22,500.

Minnesota—Duluth, and enlarging basin between Minnesota and Rice's Points, $56,250; of which a sum not exceeding $500 may be used in placing buoys in the channels and elsewhere where needed in the harbor; and the consent of the United States is hereby given to a change of the existing dock line on the east side of Rice's Point by the municipal authorities of Duluth: Provided, that such change meets the approval of the Secretary of War.

The bill appropriates $14,473,900 which is $668,300 less than the house bill and $357,507 more than the Senate bill. As the bill left the house Cleveland harbor was provided for by $125,000, but the Senate scaled down 25 per cent, which leaves but little over $93,000, which added to the amount on land gives us $193,000 to begin on the new breakwater plan, which Hon. M. A. Foran has labored for with good result.

DURING these days of pleasure travel on the lakes no virtue seems to be so much in demand as courtesy on the part of the officers of passenger steamers. The officers of lake passenger steamers are noted for their kindness and courtesy to timid passengers and their patience with those who persist in asking foolish questions. If one of the masters were asked what sunk the Oregon he would not say that water run into and sunk her, but that she had suffered a breach by collision; if he were asked the exact distance from land he would say several hundred feet right under the vessel, but for fear this answer might cause a commotion, he would add that the vessel draws but fifteen feet and there is no danger of striking. These officers commend themselves to the traveling public, and it is a pleasure to meet them on their steamers.

IT is quite distressing to note the antagonism that exists between the two houses of congress on measures framed ostensibly for the good of the country. Take the river and harbor bill, for instance. In considering the different items, one body contemplates grand improvement while the other can view nothing but an expensive scheme without merit. Give the two bodies an egg and the chances are that they would hatch out a lunatic asylum.

If the people of Cleveland wish to enjoy a rich treat they should take a trip to the St. Lawrence river and spend a few days. To enable you to see all that you desire, take a small steamer and go among the islands and you will see many things that you will never forget; thence to Montreal, down the rapids. It is surprising that some of the fine propellers do not advertise an excursion to the St. Lawrence. Try it once, some of you.

THE condition of the Cuyahoga river at the present time seems to warrant a breach in the west end of the breakwater so that a current may be established.

WE are under obligations to Hon. M. A. Foran for valuable public documents, including a copy of the river and harbor bill.

[*Around the Lakes Continued from 1st Page.*]

GRAND HAVEN.

Special to Marine Record.

At T. W. Kirby's shipyard the schooner William Jones, owned by Captain David Doll, of Chicago, has received a general overhauling and rebuild, new frames, new ceiling, and new plank on her bottom. She came out of drydock on Saturday, and is now receiving a new mainmast and main topmast. Her owner will change her name to the Jane M. Dall.

At the Grand Haven Shipbuilding Company's yard the schooner Hattie Earl had her top sides calked; the tug Frank Geele is receiving a rebuild. During the winter season this firm built a tug for Coates & Arnold, of Mackinaw, 72 feet over all, 14 feet beam, 7 feet depth of hold; a dredger 75 feet long, 25 feet beam, 6 feet 9 inches depth of hold, for White and Finch, of Grand Haven; a steam launch, 57 feet over all, 8 feet beam, 4 feet depth of hold, named the Sport. She is for sale. They hauled out the schooner Levi Grant and gave her a thorough rebuild; they also did considerable repairs to the schooners Robert Howlett, Ottawa, Hunter Savidge, David Macy, Driver, Willie Loutit, and Charles E. Wyman, and the steamers John A. Dewar and Thomas Friant.

Captain Beauvais and his fine crew at the life saving station have all their boats and life saving appliances in excellent condition and are ready to meet any emergency where the lives of our gallant sailors are in danger.

Captain Davidson, the lighthouse keeper, looks well after the lamps and fog horns and the apparatus by which they are worked, and with the aid of his assistants, keeps everything in excellent condition.

George Cowan, government inspector of steam boilers at Grand Haven, has resigned. Supervising Inspector Dailey has appointed Byron Scott, engineer of the steambarge Tempest, to fill the vacancy.

Henry Bloecker & Company, marine engine builders, are putting the machinery into Brittain & Parks' new steambarge at Saugatuck. The engine is high pressure and is 18x20.

WILLIAMS.

BAY CITY.

Special to the Marine Record.

The barge Marine City, of the D. F. Rose's tow, was left at Tawas this trip where she loaded for Cleveland.

The log boat Michigan arrived at Tawas on Friday, with her first load of logs from French river, for the Emery Bros. Lumber Company.

The steambarge D. W. Powers and four consorts arrived at this port from Tonawanda on Thursday and have again cleared for the same place.

The schooner Virginius loaded at Tawas on her last trip.

A number of Saginaw people owning sailing yachts, which are kept at this end of the river for convenience, are enjoying themselves by cruising around Saginaw Bay.

Four schooners left Tawas last week for Chicago with bulk salt.

The tug Tom Maytham and consorts A. Walton, B. M. Baker and Matilda arrived in the river Sunday. The Maytham had the misfortune to have a break in her machinery, which caused a delay of several hours at Port Huron on her way up.

Hattie Woods, an unfortunate, boarded the steamer Metropolis at Alpena on Tuesday last, bound for East Saginaw. She engaged a state room and went to sleep. When the steamer reached the river the woman was seen on deck acting in a strange manner, which caused the second engineer R. D. Robertson, to watch her. He saw her go to the side of the boat and was climbing over the rail when the engineer caught her. He asked her what she meant by that proceeding, to which she replied, "I am tired of this life and want to drown." She was watched closely during the rest of the trip and was taken to Saginaw, where she was arrested for being intoxicated. She was taken to jail and asked to be sent to Jackson, Mich., where she had friends, which was done.

The fire tug C. B. Hull ran into a sunken log on Friday last and sunk before she could get assistance. The craft was pumped out, put in the slings and repaired.

During the balance of the season the steamer W. R. Burt is to run tri-weekly excursions to Bay View.

There was launched at Wheeler's drydock last Thursday the steambarge W. R. Stafford, one of the largest and most complete carrying boats ever built on the river, with dimensions as follows: 200 feet long 32 feet beam, 14 feet hold. The boat has a pleasant cabin. She was built by Bay City & Cleveland Transportation Company for the Lake Superior travel. A number of friends were on the boat, guests of the owner, W. R. Stafford, of Port Hope, among them being Mrs. J. W. Symons, Mrs. Albert Davis, Albion; Mrs. Brigham, West Bay City; Captain Armstrong and daughter; of Bay City. Miss Frank Stafford had the honor of christening the boat.

SHAW.

PORT HURON.

The inspection of the propeller A. J. Wright has proved satisfactory, and the stockholders of the company held a meeting last Thursday evening and elected Wm. F. Botsford, Wm. Canham, Chas. A. Jex, Geo. Henry and Ed. J. Rogers as trustees, and on Friday they closed the bargain with Captain Prindiville for the Wright, at $12,500. The Wright will be put on the route between this city and Port Hope daily, as soon as her cabins have been rebuilt and furnished both inside and outside. Captain G. W. McGregor, late master of the Oconto, will command her, and Albert Roberts will act as clerk. She gave an excursion from Port Huron to Sand Beach Sunday on a trial trip. The Wright is owned by Wm. Canham, Chas. A. Jex, Anderson & Co., Chas. Wellman, C. Kern, Ed. J. Rogers, Captain McGregor, J. H. Fitzgerald, Silas Armstrong, Benj. Karrer, Bondy & Johnson, E. C. Boice, E. R. Wheeler. Thos. Fitzgerald, W. F. Botsford, of Port Huron, and W. R. Stafford and R. C. Ogilvie, of Port Hope, and Port Austin Manufacturing Company, of Port Austin.

COLLINGWOOD.

The schooner M. L. Breck, owned by Captain Thompson, of Toronto, and which went ashore on Keystone Shoal, off Point Byng Inlet lighthouse, was towed to this port Friday morning by the tug Huron. The Breck has her cargo of lumber in her hold and is floating without the aid of a steam pump. She will go on the drydock for repairs immediately.

The American schooner Nevada was docked for repairs.

SAND BEACH.

A gale which continued through Monday and Tuesday drove the following craft came in for refuge: Propellers Lowell and barges, M. Sicken and two barges, Handy Boy, tugs J. P. Clark and two barges D. Hibbard and three barges, Sweepstakes, schooner D. Provost.

DETROIT.

Special to the Marine Record.

August 3.—There are those still living who will remember forty-five years ago tomorrow, August 4, on which date the saddest event that ever occurred in our lake history happened on Lake Erie, off Silver creek, the burning of the steamboat Erie, Captain T. J. Titus, at about midnight, with the loss of two hundred and twenty-five lives. She had just received a fresh coat of paint at Buffalo and left that port at 9 o'clock in the evening, bound for Chicago, with a valuable cargo of merchandise. She was built at Erie, Pa., was of 497 tons burden, and at the time of her destruction was the finest steamer on inland waters. She commenced plying in August, 1838, and had but one commander during her existence.

During the past week there were quite a number of grain shipments from this port, chiefly for Buffalo, and in one or more instances from three to five cargoes a day. Freights continue much the same, from 2¼ to 2½ per bushel. In all, there was a total of twenty-five cargoes.

The schooner F. C. Leighton, which met with disaster some days since in Lake Michigan, while en route to Escanaba, being owned here, returned to this port for repairs.

The steamer Manitoba, which has been held in controversy the past two years, is now offered for sale by the insurance company who own her. Having been exposed to the weather for so long a time, with little or no care, it is not expected she will bring much; beside, it is fifteen years since she was built. The hull could be converted into a lumber barge, and the engine placed in a new boat.

Captain S. F. Atwood, a veteran of the earlier days of lake navigation, quite unexpectedly to those who knew him long and well, hove in sight in this city. The captain is now verging closely on to eighty years, and during his long pilgrimage on the lakes was held in high esteem by all who ever traveled with him, and his history, if written, would be full of interest, spiced with not a few amusing anecdotes. Commencing with the steamer Argo, which he was captain of in 1832, he has commanded the following boats successfully: The General Jackson, General Brady, Lady of the Lake, Oliver Newberry, Macomb, James Monroe, General Harrison, Fulton, Troy, Arrow, DeWitt Clinton, John Owen, Ariel, Bay City, Dart, J. Whitney, and Philo Parsons, and during all that time only four lives were lost, and those not through any mismanagement on his part. He has husbanded his resources, and has enough to keep himself and his good wife comfortable the remainder of their lives. They now reside in this city, at 55 Mitchell street.

The steam yacht Cyclone passed through here the other day, en route to Chicago, and was much admired by many along the docks.

The revenue steamer Fessenden for some time past has been actively on the move, mainly on Lake Huron, looking after delinquent vessels, regarding their papers.

The excursion business continues at high tide from all sections. The past week the Saginaw brought from Toledo, on three separate occasions, some four hundred persons, and the Chief Justice Waite a like number.

The steamer Evening Star, which for a short time was put on the route to Star Island only, has hauled off and gone to Toledo in the excursion business, the former route not panning out as was expected.

The steambarge Morley's name has been changed to Grand Traverse. She is still at Port Huron, and about ready for business.

The steamer Eighth Ohio, which has just been rebuilt at this port, was launched on Thursday, and appears in better shape than ever. It will be some time before she is completed, and it is probable that ere that time arrives she may be sold.

The steambarge City of Mt. Clemens, Captain Gilbert Lacroix, which has been plying for three months this season, has made twenty trips from Oscoda to Detroit, one to Sandusky, and one to Toledo, having cargoes each way, which speaks well for her management.

Anchored in the stream for a few days past was the barge Banner, of historic fame. This vessel has been in commission for nearly forty years, and yet looks in good trim. She was built at Conneaut, and came out as a brig, commanded by the late Captain M. Capron, of that port. On her advent she astonished all beholders when it was announced that she had a capacity of 18,000 bushels of grain. The first trip from Chicago she beat down past Detroit, and as her passage was anticipated there were hundreds along the docks who stood gazing at the monster's movements.

The government steamer Warrington, so long commanded by Captain Scott, has not been brought out this season. As there is no public work going on, it is quite probable she will remain tied up the remainder of the season.

The schooner D. Provost was sold the other day by Christian Stein, of Huron, O., to Detroit parties for $2,000. She was built in 1864, is 99 tons burden, and was first owned and sailed by Captain John Peterson, a Swede, who commenced his career on the lakes in 1836.

The last arrival from Lake Superior Saturday reports no further progress in raising the schooner Thomas P. Sheldon in Lake George. It is now some seven weeks since the expedition left here, and with the accidents and delays they have met, there will not be much of a margin arising from the undertaking. It is to be hoped that better luck is in store for them from this time out.

From three to four rafts pass this week from Lake Huron, destined, respectively, to Buffalo and Toledo. The tug Champion has just arrived safely at Buffalo with one, and the Swain with another for the same port passed here on Saturday.

Moffat & McVenn made several charters during the week of coarse freights. The schooner Provost was taken for lumber from Alpena to Detroit at $1.25; also, barge Church, coal, Huron to Point Edward, at 30c; barge Hale, a like cargo and rates; the schooner Arctic, ties, Colchester to Fairport at 6c each.

The steam yacht Sigma, of Toledo, called here Friday on her return from Duluth and points on Lake Superior. After taking on fuel she proceeded homeward.

About 1:30 o'clock last Thursday morning a collision occurred at the Lime Kiln Crossing between the schooner Selkirk and the tow barge Favorite, which resulted in about $1,000 damage to both vessels. The tug Oswego had the Selkirk in tow, bound down and the Favorite was bound up in tow of the tug Music. When the latter tow hauled up at the lower end of the range light series the Favorite, which was the last vessel, failed to keep in line with the others, and so fouled the Selkirk. The damage to the Selkirk was principally to her rigging, while the Favorite had some of her planking ripped off by the fluke of the Selkirk's anchor.

The Whitbeck Lumber Company, of Detroit, sold on July 28 the tug Tillinghast to a tug company at Sturgeon Bay for $2,000. She was built in 1858, and is 37 tons burden.

The three-masted scow, Grace Amelia, which has been lying in a demoralized condition over at Windsor all season, was on Friday towed up to Walkerville and there sunk, which will probably be the last of her, and also the tow barge Michigan which was taken there has since sunk and rolled over. She was formerly a Grand Trunk ferry steamer.

Captain Brooks, of the barge Victor, was placed under arrest at Windsor for allowing her to sink, but after his examination he was honorably acquitted.

The barge Mary Birckhead had a new foremast placed in her at the Detroit dry-dock on Monday.

The steambarge F. McBrier, on Saturday night ran aground near Mama Juda island, Detroit river, but was released, jointly, by Captain Mills' tugs and the Ballantine.

The barge Australasia, while en route, called here on Sunday and took on board a number of calkers to work at her decks. This was done to avoid delays.

The United States steamer Michigan returned here from her western cruise on Friday, and left the following day for Lake Erie. HALL.

EAST SAGINAW.

Special to the Marine Record.

Captain T. H. Speedy and family have gone on a two weeks' cruise around Saginaw Bay, on his yacht Maude.

The propeller Saginaw Valley took a large number of Saginaw people to Cleveland on her last trip out.

The steamer W. R. Burt is giving three excursions a week to Bay View, and is meeting with good success.

The steamer Lucile took the Orphans' band to Point Lookout Saturday night. The day was divided between Point Lookout and the Charities, and all unite in saying that the Lucile can not be excelled in accommodations, etc., nor her officers for courtesy and kindness.

The tug Peter Smith and tow are in the river.

The recent trouble between the 'longshoremen and stevedores has at last been adjusted. The way they do it now is every one for himself.

The barges Brainard, Birckhead, E. Cohen, McDougall, R. J. Gibbs, A. W. Wright, and Jenness were all loaded by stevedores during the week, and the loading of boats can now be finished at Bay City by stevedores regardless of the 'longshoremen.

A sailor engaged in loading the barge W. R. Clinton at Briggs & Stillman's mill, had his arm broken by a heavy stick of timber falling on it while at work.

The steambarge Tempest brought her tow into the river on Monday and then left for Tawas to load.

The steambarges Maine, Benton and Bay City, and tugs Peter Smith and Tom Maytham, with their tows, arrived in the river Sunday.

The steamer Lucile has been chartered for a two weeks' trip by the Russ military band, who will give concerts at Tawas, Alpena and other points.

The friends of Captain John R. Rogers, of the steamer L. G. Mason, will regret to learn of his serious illness. The captain has many friends on the river who wish for his speedy recovery. SHAW.

ST. CLAIR FLATS.

Special to the Marine Record

The largest number of passages of steamers, vessels and barges of the season in thirty-six hours was from Wednesday evening until Thursday morning.

The scow John J. Enright, sunk about fifteen rods above the lower light in the government canal, is, up to this writing, lying on her starboard side, with her spars extending toward the center of the channel, and all steamers bound down, are cautioned to keep well to the eastward to clear her. We have taken pains to keep a night-watch to inform all bound down boats to that effect.

The tug D. L. Hibbard passed down Thursday from Lake Superior with three barges in tow. She returned up Sunday with barges loaded with merchandise for ports above. Her owner and master deserve great credit for the long trips, considering the capacity of the barges. The captain tells us he will continue to run as long as possible. We wish him success, as his boat is a stranger in our midst.

The Milton D. Ward continues to keep the fare from Detroit to Port Huron at opposition rates, while the Star line and Darius Cole have doubled the same.

McNiff & Son have kept a strict watch of all bound down steamers and vessels to notify them of the obstruction in the lower end of the canal, for which many thanks from masters and pilots have been received.

Agents have called upon McNiff & Son urging them to substitute electric lights for oil in range and point lights.

Two lights have been placed on Fish's dock, red over white, to guide pilots after leaving range or before picking up range on foot of Herson's island; also, ranges on the head of Russel's island, opposite Algonac. The ranges on Russel's island are almost in range with the government buoy, so that when pilots pick up the range they also have the buoy in range, thus enabling the mariner to use his judgment, and leave them well to starboard, coming down. There will be a range put on Stag island by McNiff & Son as soon as masters and owners show any disposition to keep up the same, making a total of fifteen lights.

The schooner Adventure, while working down the Southeast Bend, loaded with stone from Grindstone city, missed stays and run on, opposite McNiff & Son's lower ranges. BOB.

SAULT STE. MARIE.

The steambarge Thomas W. Palmer, towing the schooners Ogarita and Emma L. Coyne, bound down from Ashland to South Chicago, met with an accident to her machinery ten miles below this place. Repairs were made here.

The canal report for July shows the greatest daily average so far. It is a trifle less than forty-two per day. There is a corresponding increase in both freight and registered tonnage.

The new bulkhead of solid timber that has been placed in the schooner T. P. Sheldon has been completed.

The wrecking tug Moore with schooner Mayard in tow arrived with the machinery of the C. P. steamer Algoma. A number of steel plates were included in the wreckage.

ALPENA.

The total shipments of lumber, etc., by vessels that reported, the present season from Alpena are as follows: Lumber, feet 59,504,000; lath, 2,883,000; shingles, 1,360,000.

FAIRPORT.

The machinery to be used in handling iron ore and coal is beginning to arrive and preparations are being made to put it in place. The dock building continues to go forward with a progress that indicates that the day of the arrival of ore in increased quantities, and the shipment of coal is near at hand.

CLAYTON.

Special to the Marine Record.

The display of northern lights on Tuesday evening was beautiful, reaching far to the east and west and high in the heavens. The mirage seen at Carthage, N. Y., last week on the St. Lawrence river from Clayton to near Alexandria Bay, on the islands, parks and steamers was a grand sight to those who saw it, and one never to be forgotten.

The sailing yacht Condor, of Toronto, is in port and the crew are enjoying themselves here for a few days.

The steamer Rothesay is in commission again, and took a large excursion to Morrisburg on Wednesday.

A number of fine steam yachts are on the river, one from Detroit and two from Montreal.

The steamer Hazleton, on her last trip down from Oswego, blew the packing out of her steampipe, and was towed into Kingston.

The shoals around the Thousand Island park are picking up the steamers. The Quintie, of Picton, Ont., with four hundred people on board, on Saturday evening in going into the park, run on a shoal and passed nearly over and stuck nearly midships. Some of the passengers became panic-stricken, but by the coolness of the captain and crew they were calmed down. The steamer John Thorne came to their rescue, and took the passengers ashore. On Sunday morning the Thorne pulled her off and landed her at the park dock. A green hand pilot is no use on the river and the sooner owners of steamers find it out the better for them.

Sunday the St. Lawrence river was flooded with excursion parties from all points.

Through the kindness of Mr. Charles M. Marshall, insurance agent at this port, and with Messrs. Henry Webber and John Lalone as oarsmen, we were up the bay of Quinte to Picton, fishing, on the 27th ult. We drove over and visited Salmon Point and viewed all that is left of the schooner Henry Folger. Although the vessel struck and went to pieces three-fourths of a mile from shore, we found large portions of the wreck which, after breaking up, had drifted high and dry upon the beach, about twenty rods below the lighthouse. She split in two, from stem to stern. A large piece of her port bilge, at least 80 feet long, I found firmly imbedded upon the gravelly beach, and liable to remain there for many years, a monument of that terrible disaster; also, a large piece of her topsides with plank shear, stanchions, rail, and forward timberhead attached. On the grounds surrounding the lighthouse many things from the wreck can be found. Only two weeks ago her capstan was fished out and now lies upon the shore with the cap on top gone. Myself and party brought away portions of the wreck and many pieces of coal which we found lying upon the beach. The horseshoe that sailors place upon the samson post for good luck was taken off and will be given to Captain James McDonald's widow. The keeper of Salmon Point light kindly answered the many questions asked.

The lake and river steamer Passport, of the Richelieu and Ontario Navigation Company's line, when leaving the Cornwell canal Sunday night, struck a pier at the entrance and sunk in twenty feet of water. The passengers and baggage were taken off. A wrecking expedition will attempt to raise the steamer. The Passport was a light draft iron sidewheel steamer. She was built at Kingston in 1847 and plied as a passenger boat between Montreal and Toronto. She was owned by a company in Montreal, and valued at $30,000. It is not known whether she was insured, or whether there is any possibility of raising her. B.

STEAMBARGE FOR SALE.

Dimensions: Length 109 feet, 22½ feet beam, 6½ feet depth at shoalest place, draws 7½ feet water loaded and 6 feet light aft and 14 inches forward. Machinery 15½x20 high pressure. Will run 600 miles on 20 tons of slack. Two spars and everything in first-class shape, and a splendid sea boat. She will carry 282 tons of coal or 160,000 feet of lumber. Three years old and classes A2 and is valued at $10,000 in Lloyd's; cost $14,000 in 1883. Can be bought cheap for cash.
Address W. E. RICE, Detroit, Mich.,
Care of Parker & Millen.

STEAM LAUNCH FOR SALE,

A handsome new steam launch 57 feet long over all, 8 feet beam, 4 feet depth of hold. Engine 8x8. Steel eliptic boiler 5½ feet high, 3½ feet wide, 6½ feet long. Tested to carry 120 lbs. steam per square inch. Licensed to carry 48 passengers. Can run fourteen miles an hour. Address,
DUNCAN ROBERTSON, Shipbuilder,
Grand Haven, Michigan.

STEAM YACHT FOR SALE.

The steam yacht Enterprise now at Congress Lake, near Canton. Length 35 feet, beam 9 feet, depth 4 feet, draws about 2 feet 6 inches. Has carried 64 passengers. Engine 5x5 high pressure. In good shape, and will sell for $400 at Congress Lake. Address,
JAMES NORMAND,
352 Washington Street Cleveland, O.

HISTORY OF LAKE NAVIGATION.

BY J. W. HALL.

Written for the Marine Record.

CHAPTER LXXXII.

In 1869 there were four side-wheel steamers commissioned, with an aggregate of 1326 tons; twelve propellers, 5,621 tons; twenty-seven tugs, 936 tons, and ninety vessels, (of which eight were barges,)21,372 tons, making a grand total for the season of 29,255 tons. The following were built that year: Side-wheel steamers, Corona 420 tons, Ivanhoe 282 tons, and Sheboygan 624 tons. Propellers, Calvin Campbell 373 tons, Coleman 100 tons, Favorite 51 tons, Jay Gould 996 tons, J. L. Hurd 759 tons, Lanorena 447 tons, Thomas A. Scott 1159 tons, Annie Young 1006 tons, A. Van Raalte 175 tons, Petronille 70 tons, Rose 110 tons, Westford 375 tons. Tugs, E. L. Anthony 14 tons, H. Bailey 22 tons, Lon Edes — tons, Martin Green 18 tons, Frank Moffat 122 tons, C. P. Morey 30 tons, C. P. Morse 24 tons, S. Neelon 29 tons, Red Jacket 13 tons, T. R. Scott 10 tons, L. P. Smith 39 tons, Molly Spencer 53 tons, J. H. Martin 37 tons, Annie 13 tons, William Avery 9 tons, John Bright 29 tons, A. Campbell 29 tons, Sarah Daley 18 tons, Bob Hackett 65 tons, Minnie Hall 47 tons, Jerome 19 tons, S. R. Norcross 30 tons, M. F. Parsons 60 tons, Fanny Shriver 20 tons, Toledo 5 tons, O. Wilcox 158 tons, York State 23 tons. Schooners and barges, Active 335 tons, American Giant, 365 tons, Dan Baker 196 tons, E. G. Benedict 154 tons, Boaz 127 tons, Colonel Bracket 186 tons, Christie 146 tons, City Painesville 600 tons, E. S. Catlin 372 tons, Lincoln Dall 206 tons, Eliza Day 125 tons, M. L. Dunham 116 tons, C. K. Dixon 149 tons, S. S. Ellsworth 113 tons, S. P. Ely 627 tons, Espindola 50 tons, Lady Essex 33 tons, Evening Star 189 tons, Fawn 50 tons, Flying Scud 63 tons, D. G. Fort 358 tons, Fortune's Friend 10 tons, Fortune's Trial 10 tons, Daniel Freeman 194 tons, Moses Gage 225 tons, C. Gearing 112 tons, Gladstone 175 tons, Guiding Star 324 tons, A. Gebhard 354 tons, L. S. Hammond 395 tons, A. O. Hanson 185 tons, Agnes Hope 262 tons, Irene 79 tons, C. L. Johnson 199 tons, E. Kane 376 tons, Keepsake 286 tons, Lake Forest 332 tons, L. L. Lamb 253 tons, Iver Lawson 175 tons, Louise McDonald 210 tons, John Magee 331 tons, Maggie 50 tons, Mariner 35 tons, Marquette 400 tons, H. F. Merry 170 tons, Midge 70 tons, Mary Amanda 165 tons, Nile 70 tons, Pathfinder 635 tons, Libbie Pratt 204 tons, Alice Richards 285 tons, J. S. Richards 311 tons, E. M. Rutherford 211 tons, J. F. Rust — tons, Thomas C. Street 362 tons, Shannon 400 tons, Silver Cloud 75 tons, I. S. Skinner 195 tons, W. P. Sherman, 75 tons, H. J. Webb 431 tons, A. Walton 372 tons, Mears 421 tons, C. Raab — tons, Alaska 85 tons, Philo Bennett 125 tons, B. M. Baker 186 tons, A. F. Braley 371 tons, Carlingford 40 tons, Reed Case 330 tons, U. S. Davis 63 tons, Hattie Earl 100 tons, Eliza 50 tons, Exchange 35 tons, Emerald 286 tons, C. Gearing 112 tons, H. & G. 600 tons, J. K. Colfage 81 tons, Annie Lyon 53 tons, J. T. Mott 315 tons, J. H. Magruder, 275 tons, D. M. Norton 21 tons, W. H. Oades 230 tons, Pride 24 tons, Peshtigo 660 tons, St. Cloud 28 tons, T. A. Scott 741 tons, S. J. Tilden 613 tons, Venture 101 tons, D. A. Wells 310 tons, Nellie Winlock 32 tons, B. M. Barker 186 tons.

CHAPTER LXXXIII.

The first start out of boats in the spring of 1870 at Detroit was the steamer G. W. Reynolds, Captain David Burke, which plied between Detroit and Malden, commencing April 2. She was built at Toledo in 1864, and was 171 tons burden. Two years afterward, in the month of November, she was burned at Bay City. Her engine was formerly in the steamer Experiment.

At Buffalo the propeller Idaho, 915 tons burden, Captain B. Penney, took her departure April 16. She belonged to the Western Transportation Company, and although at this time twenty-three in service, is yet prominent, plying to Lake Superior, in the Lake Superior Transit line, commanded by Captain Delos Waite. Her first master, Captain Penney, is still living, retired on a farm.

The Straits were opened April 17, the first passage through being the propeller City of New York, bound eastward. She is yet in service as a steambarge, employed in the lumber trade, having a consort and has now been running twenty-three years. She was built for the Northern Transportation Company's line, plying between Ogdensburg and Lake Michigan ports, Crawford & Chamberlain, proprietors.

The steambarge Yosemite, Captain John Estes, was the first arrival at Saginaw from the rivers, April 2. She was then as now engaged in the lumber business, and has been nineteen years in service.

The opening of the Welland canal was about the same time as at Buffalo, the schooner J. B. Penfield being the first to arrive there.

The opening to Lake Superior was on April 29, the propeller Pacific, Captain Ed Kelley, the first arrival. The Pacific, 766 tons burden, was built at Cleveland in 1864 by Peck & Masters, and when first commissioned was not surpassed in speed by any steamer on the lakes. She is at present owned in Detroit by A. Chesebrough, Esq., and is in a good state of preservation notwithstanding her twenty-two years service. She is not classed below grain or ore carrying, although at present employed in the lumber and other traffic, plying through to Ogdensburg. Captain Kelley who sailed her at the period above referred to, was a genial, whole-souled sailor, and very popular on the Lake Superior route.

The other appointments on the Lake Superior route during the season of 1879 were as follows:

Steamer Keweenaw. 800 tons, Captain Albert Stewart.

Propeller Meteor, 956 tons, Captain Thos. Wilson.

Propeller Northern Light, 857 tons, Captain M. H. Murch.

Propeller R. G. Coburn, 1,000 tons, Captain R. S. Ryder.

Propeller St. Paul, 1,200 tons, Captain Allan McIntyre.

Propeller Arctic, 785 tons, Captain J. E. Turner.

Propeller Old Concord, 522 tons, Captain C. R. Cleveland.

Of the above named boats only three are in service or existence. The Meteor was burned at Detroit in 1873 while lying at the dock, commanded at the time by Captain John Robertson. One life was lost. The Keweenaw lies in the St. Clair river, near Star island, serving as a floating hotel, but it is not probable she will ever be placed in commission again. The R. G. Coburn, while in command of Captain Gib Dumont, bound down from Lake Superior, in 1871, foundered in Saginaw Bay and upward of thirty lives were lost, including her master. The Concord is serving as a lumber barge, and the Northern Light, which, for several years, was thus employed, is out of service. Captain Albert Stewart, who has been long enough on the lakes to be considered a pioneer, has been in command of the steamer City of Alpena the past three or four seasons. I need not refer to Captain Thomas Wilson who had a wide popularity while sailing steamers to Lake Superior. He is right at your door, a steamship owner, and manager of the Wilson Transit line. Captain M. H. Murch was highly esteemed by the traveling public, was a careful commander, and I believe is a resident of the Forest City. Captain R. S. Ryder, with twenty others, went down in the propeller City of Detroit, in a terrible gale, late in the fall of 1873. He had been many years in the Lake Superior trade, and left behind him a good record. Captain Allan McIntyre commands the propeller Peerless in the Chicago and Lake Superior line, where he has been a favorite for several years past. Captain J. E. Turner, a native of Cleveland, and who enjoyed for many years a wide popularity, died at his brother's residence at Trenton, Michigan, in the fall of 1873. His career while in command of steamers was marked by a uniform courtesy to everyone, and I believe it is not on record that any boat under his management ever met with disaster. Captain C. R. Cleveland, I have lost trace of for some time back, and can only add that his career has been a meritorious one, and was as true in the various grades of his life as the points of the compass.

Early this season a new forwarding firm was established at Detroit, composed of W. O. Ashley, John Lewis and Horace Mitchell, under the name of Ashley, Lewis & Company. Their office and dock were at the foot of Griswold street. They were agents for the steamer Jay Cooke, plying to Sandusky; also, the steamers W. R. Clinton and City of Sandusky, running between Saginaw and Toledo. They maintained a first-class position with the business public, and are yet one of the most prominent houses, and known as Ashley & Mitchell, Mr. Lewis having retired some years since. For some time past the house has been located at the foot of First street.

Lake freights, at the early stage of 1870, opened somewhat dull which was attributed to the situation at St. Clair Flats, and the advancing tendency of the markets. Rates, however, were firm at 5½c, 5c and 5¾c for wheat and 4c for oats from Chicago to Buffalo and to Oswego 10½c, and 11c for wheat to Oswego; also, 11c for wheat to Kingston. P. J. Ralph & Company were the principal charterers at Detroit. From Detroit to Oswego, wheat ruled at 10c. Lumber, from Bay City to Toledo from $3.20 to $3.25, and to Sandusky and Cleveland at $3.50, and from East Saginaw 50c higher. The first charter of the season was from East Saginaw to Erie at $4.

HIGH SPEED SHIPS.

It is curious, says The Engineer, that in all these discussions concerning marine high speeds, so little is said about the power and coal wasted by friction and badly made propellers. It has long been known that of every 1,000 indicated horse power developed in a steamer, not more than 450 to 500 are utilized in driving her. Here is an enormous margin which no one attacks, and yet events occur almost daily which show that something, much or little, might be done. Thus, for example, Mr. Nichol, one of the speakers, in the discussion related an experience which he had had. A ship was built on the Tyne to go at 14 knots, with fifty-five revolutions per minute. The propeller was designed, and rejected as being too small, by the superintendent engineer to the company for which the ship was built. On the trial trip the engines would only make forty-nine revolutions per minute, when the bearings heated, and a very unsatisfactory voyage as to speed was made. The cause was sought for, and found in the undue proportions of the propeller. Ten inches were cut off the top of each blade, and the engines made fifty-five revolutions without heating and with the most satisfactory results. In the case again of the steamship John O. Scott, the propeller was very heavy, and the consumption 15 tons a day. The propeller was reduced in diameter and area, and the ship then went at the same speed, making ten revolutions per minute, and the consumption fell to 13 tons a day. There is, our readers may rest assured, no special isolated virtue resident in expansion or high speed, or lightness, or forced draught. Each of these things has its advantages and disadvantages, and the skill of the engineer is shown, not by advocating any one of these as a panacea for all the ills ship owners are heirs to, but by so combining the best features of all that a satisfactory result may be reached; and the engineer ought to know that the value of the result will always be estimated by the ship owners in terms of pounds, shillings, and pence, and on no other basis.

THE LIFE CAR.

There is the liveliest kind of a war going on in Congress over the claims of Captain Ottinger, of Erie, Pa., and Captain Francis, of New York, to the honor of inventing the life car now used by the life saving service for the rescue of seamen. Both claim to have invented it and both have bills in the house of representatives asking a reward for their service to the government and the human race. Every time Captain Ottinger's bill comes up the friends of Captain Francis, under the lead of Mr. Hewitt, defeat it, and when the Francis bill is reached Mr. Scott manages to knock it out in the interest of Captain Ottinger. Both men are in Washington and are to be seen daily at the capitol pressing their own claims. The consequence will be that both of them will lose what they are after, and the officers of the life saving service say that such a decision will be in the line of justice for neither one is entitled to the honor claimed.

The life saving service has evidence to show that as early as 1806 the life car, which both Francis and Ottinger claim to have invented, was designed by a Captain Winship, an English mariner, and was described in a book in 1811 by Captain Mauby. In the eighth edition of the Encyclopedia Britannica, page 443, the life car or surf boat is described also, and Captain Winship is given the credit for the invention. It is also described in a similar manner in the report of the United States coast survey for 1848. In 1849 Captain Ottinger applied for a patent for a boat of similar design, and it was denied him, on the ground that it had been in use in England for forty years. Notwithstanding all this both Captain Francis and Captain Ottinger still insist that they are entitled to the credit of furnishing distressed seamen with this means of rescue.

OIL FUEL NOT ECONIMICAL.

"From Glasgow," the Shipping World says, "comes evidence of an unmistakable character that oil has been tried and found wanting. The managers of the Laird line, after a long trial of oil on board one of their steamers, have decided, on purely economic grounds, to abandon altogether the use of oil as a fuel, having ascertained from practical tests extending over a considerable period that coal is the cheaper fuel of the two. Accordingly, they have had the oil tanks taken out of their vessel, and have returned to the use of coal, notwithstanding the fact that the oil tanks and the apparatus for accomplishing complete combustion of the oil cost a considerable sum of money. Although considerable ingenuity has been displayed, and several difficulties have been overcome, there is nothing in the latest apparatus and arrangements which have been adopted in southeastern Russia, where petroleum has been extensively used as fuel, which appears likely to expedite the adoption of liquid fuel in our mercantile marine. There is little probability of petroleum being sold in this country at a price which will enable it to take the place of coal."

Captain of a Damariscotta schooner (to green hand, who, upon being told to get aboard, makes off in the direction of a pile of lumber up the wharf)—"Avast, there, you lubber! Where are you going!"

Green Hand (a son of Erin)—"'Phere am oi a-goin'! Faith, an' wasn't it yourself who was jist afther tellin' me to git a board, sor? Phere—"

A sudden spring—a short struggle—a loud splash—and the captain seeks another G. H. *Detroit Free Press.*

Alderman McMaster and Captain Gibson, local government inspectors of steam vessels, were resting from their labors at the tug offices on the dock a day or two ago. They had been to Charlotte once or twice lately to inspect some new steam yachts, they said, and they were very warm in praise of Rochester's ambitious summer resort. But there was one feature of the landscape, they thought, that was a decided drawback, the mosquitoes. The size and vigor of these musical socialists, as described by Uncle Sam's officials, would discount the specimens reported from Florida, or at least the stories they told would.

"Do you remember, captain, the day we were inspecting the Hazeltine?" asked the alderman.

The captain remembered.

"We could not get any pressure on her boiler for a long time," explained the former to the crowd, "and we were stumped to find out what was the matter; couldn't pump her boiler full of water, you see. After a while we found that the mosquitoes had bored so many holes in it that the water all run out."—*Buffalo Express.*

FOR SALE.

Scow Mary Garrett is offered for sale. She is 80 feet over all, 20 feet beam and 7 feet depth of hold. Her custom house measurement is 78.45 gross, 74.53 net, and she will carry 180 tons of coal or 100,000 feet of lumber. She received extensive repairs during the winter and some new outfit. Price, $1,500. Address,

MARINE RECORD, Cleveland, O.

VESSEL OWNERS AND AGENTS.

H. J. WEBB & CO.,

Ship Brokers, Vessel Owners and Agents.

[ESTABLISHED IN 1856.]

H. J. WEBB & Co., will charter Vessels for Lake Trade. Special attention given to Chartering Vessels in the Lake Superior Iron Ore Trade, both for the season and single trip.

ARCADE BUILDING, 101 ST. CLAIR ST., Room 27. Cleveland, Ohio.

TELEPHONE { Office, No. 338. Residence, No. 1328.

MOORE, BARTOW AND GILCHRIST,

Ship Brokers and Agents,

No. 101 St. Clair Street, Room 15. CLEVELAND, - OHIO.

ALEX McDOUGALL,

VESSEL AGENT AND BROKER,

Duluth.

Owners and masters of vessels wishing to get cargoes of grain from this port will do well to confer with me. Will be glad to furnish information in regard to cargoes, also in relation to docks, depth of water, etc., at **Duluth, Agate Bay** (new iron ore port), **Port Arthur, Washburn, Ashland,** and all points near the west end of Lake Superior. Good gangs of men furnished on short notice for trimming cargoes of grain, loading and unloading all kinds of freight.

THOS. WILSON

MANAGING OWNER

Wilson's Transit Line.

Gen. Forwarder. Freight and Vessel Agent.

CLEVELAND, O.

J. J. H. BROWN. EDWARD SMITH

BROWN & CO.,

Ship Brokers and Agents.

Special Attention given to Surveying, Appraising and Settling Marine Losses.

Exchange Building, 202 Main-st., Buffalo, N. Y.

PALMER & BENHAM,

Vessel Owners & Agents,

New Bank Building, corner of Superior and Bank Street, Cleveland, Ohio.

WARNER & BECKER,

Vessel Agents and Brokers,

ROOM 10,

Arcade B'ld., 101 St. Clair St,

CLEVELAND, OHIO.

JOHN P. DEVNEY,

Marine Collector.

Collections Promptly Attended to.

ASHTABULA HARBOR, OHIO.

JAMES T. ROSE,

Vessel Agent and Broker,

Room 4, Exchange Building, Duluth, Minn. I have an excellent gang of Trimmers this season, Captain Miller's old Crew. Special Attention Paid to Chartering Vessels, and seeing that they get dispatch in Port.

CORRESPONDENCE SOLICITED.

PROCTORS IN ADMIRALTY.

ROBERT RAE,

Admiralty and Insurance Law Office,

Room 37 Merchants' building, CHICAGO, ILL.

GEORGE E. HALLADAY.

Attorney and Proctor in Admiralty.

Marine Business Promptly Attended To.

OFFICE 21 BUHL BLOCK, DETROIT, MICHIGAN.

WM. H. DeWITT,

Attorney and Proctor in Admiralty.

ROOM No. 6, BLACKSTONE BLOCK.

CLEVELAND, OHIO.

GLOBE SHIPBUILDING CO.,

Build Iron & Steel Boats of Every Description.

Builders of Iron Steamers Onoko, Wm. Chisholm, J. H Devereux, Passenger Steamer Darius Cole, Steamyacht Twilight, Iron Tugs International and Record, and steel steamer Spokane.

OFFICE AND WORKS, OLD RIVER ST., CLEVELAND, O.

ST. MARY'S, OHIO. MONTPELIER, OHIO. } OAR MILLS. NEPTUNE ANCHOR WORKS.

DE GRAUW, AYMAR & CO.,

MANUFACTURERS AND IMPORTERS OF

CORDAGE, OAKUM, WIRE ROPE,

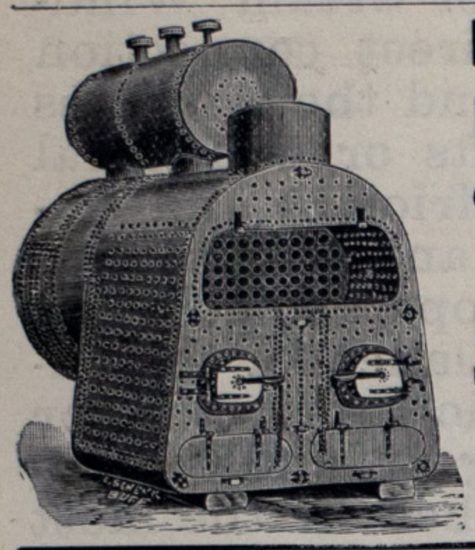
Chains, Anchors, Oars, Blocks,

RUSSIA BOLT-ROPE,

Flags, Buntings, Cotton and Flax Ducks,

MARINE HARDWARE, SHIP CHANDLERS' GOODS GENERALLY.

34 and 35 South-st, New York.



EAGLE BOILER WORKS,

M. RITER, Prop'r,

Cor. Indiana & Mary St.,

BUFFALO, N. Y.

MANUFACTURER OF

High and Low Pressure

Marine, Stationary, Portable, Locomotive and Upright Boilers; also, Salt Pans, Smoke Pipes and Heavy and Light Plate Iron Work of all Descriptions.

REPAIRS PROMPTLY ATTENDED TO.

CRESCENT SHIP GREASE

Is especially prepared for MARINE use. It is far superior to tallow for slushing down spars, and can be applied without heating; gives them a fine, glossy appearance; is better than oil for lubricating Windlasses, Steering-gear, etc.

For Sale by Ship-chandlers Generally.

Manufactured by CRESCENT MANUFACTURING CO., 3 and 5 Michigan St., Cleveland, O.

COAL BOATS

WITH

O. W. SHIPMAN;

Dock Next to Hodge's Iron Works.

PRICES ALWAYS AS LOW AS THE LOWEST!

MASSILLON - - $2.50 PER TON.

HOCKING VALLEY - 2.35 " "

PROMPT DISPATCH!

DETROIT, MICH.

SIGNAL LAMPS

For Steamers and Sailing Vessels.

PATENT FLUTED LENS AND PERFECT COLORS.

GET THE BEST AND AVOID COLLISIONS.

These Lamps give a more brillant light than any Signal Lamp now in use.

They have been adopted by the principal Ocean and Lake Steamers

Over Ten Thousand Now in Use.

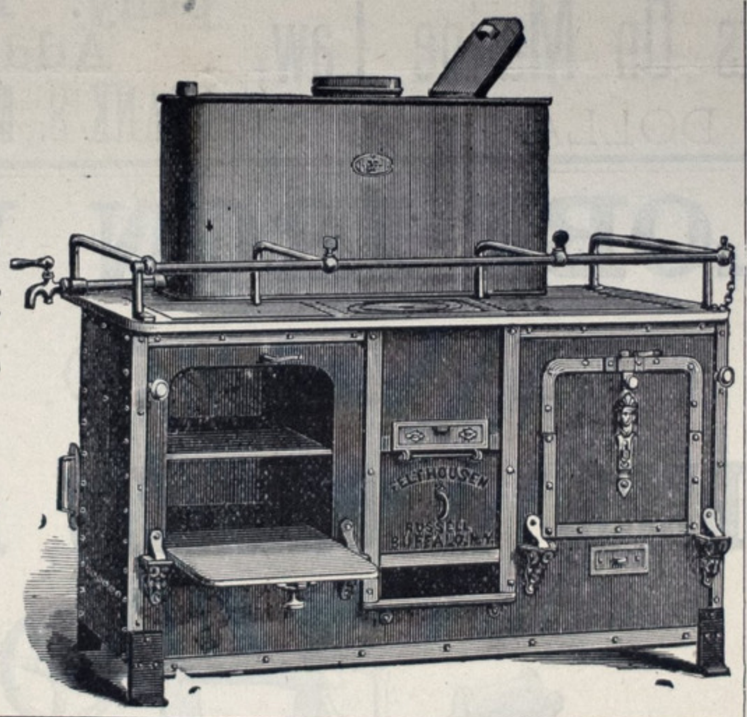
WE ALSO MANUFACTURE THE CELEBRATED

French Wrought Iron Ranges and Broilers of all Sizes for Steamers and Hotels.

Steamboat Copper, Tin, and Sheet Iron Workers

FELTHOUSEN & RUSSELL,

139 & 141 MAIN ST., BUFFALO, N. Y.



D. S. AUSTIN. EMMET AUSTIN.

D.S. AUSTIN & CO.

Ship Chandlers & Sail Makers.

WHOLESALE AND RETAIL DEALERS IN

Cotton Duck, Cordage, Wire Rigging, Oakum, Pitch, Tar, Paints, Oils, Etc.

Vessels' and Steamers' Complete Outfits Furnished on Short Notice.

FOOT OF WASHINGTON STREET, BUFFALO, N. Y.

HOWARD H. BAKER & CO.,

Ship Chandlers and Sail Makers,

HAVE REMOVED TO THEIR NEW AND COMMODIOUS STORE,

18 to 26 Terrace,

Corner of Commercial and Pearl Streets'

BUFFALO, N. Y.

SAMUEL F. HODGE & CO.,

MANUFACTURERS OF

MARINE,

Stationary & Portable Engines,

MINING MACHINERY AND

PROPELLER WHEELS,

Riverside Iron Works, 314 to 326 Atwater Street,

DETROIT, MICH.

RUELLE & CO'S TUG LINE.

TUGS:

J. L. MINER, C. D. McKINNON, QUICKSTEP.

RIVER AND HARBOR TOWING,

STEAM PUMPS AND LIGHTERS.

WRECKING A SPECIALTY.

UP RIVER OFFICE,	DOWN TOWN OFFICE,
Belle Isle Ice Co.'s Dock.	J. W. Westcott's foot of Woodward Ave.
Telephone No. 199—3 rings	Telephone No. 55.

DETROIT.

ROBERT E. HILLS,

57 & 59 North Wells St., Chicago, Ill.
Telephone 3321.

STEAM FITTING AND HEATING,

Wrought Iron Pipe & Fittings.

ENGINEER'S SUPPLIES.

General Jobbing Work Done Promptly.

Also, Proprietor of North Side Brass Works.

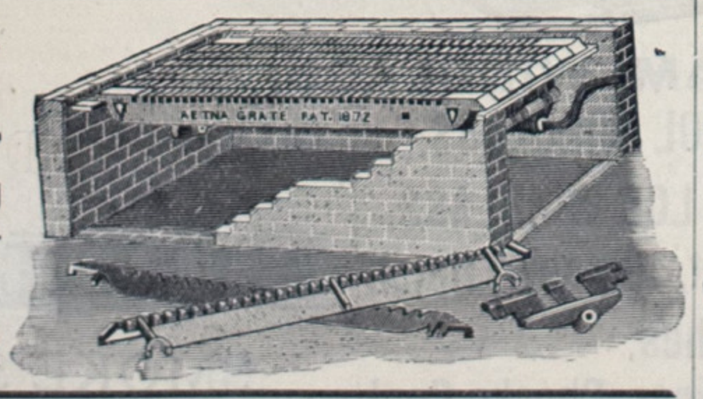
THE ÆTNA GRATE.

G. C. BARNES, Agt.

This Improved Shaking Grate Especially Adapted to Burning Slack.

Globe Iron Works, Manufac's.,

Office and Foundry, corner of Elm and Spruce-sts., CLEVELAND, O.



WARD & JACKSON,

SHIPSMITHS.

All Kind of Forgings, Bolts and Truss Rods for Building.

49 Main-st Cleveland

GEORGE SAAL'S SON.

Copper-smithing of all Kinds.

VESSEL WORK A SPECIALTY.

403 and 405 Detroit-st., corner Duane-st., Telephone 1638. CLEVELAND, O.

J. C. GOSS,

[SUCCESSOR TO ED MAYES.]

Sail Maker and Rigger,

16 Woodward ave., Detroit, Mich.

OVER H. D. EDWARDS & CO.

First class accommodation for storing vessel outfits Fire proof building. Contractor for covering boilers.

CAPT. GEO. A. SIMPSON,

Compass Adjuster,

COMPASSES, BAROMETERS, PATENT LOGS AND MARINE GLASSES REPAIRED,

Schooners can have their Compasses Adjusted for Local Attraction at the time of repairs by stating how much they are out on East or West Courses, and which way it leads, North or South of above Courses,

161 River St., Cleveland, O.

FOR SALE,

AT

THE GLOBE IRON WORKS.

SECOND HAND MARINE BOILER four feet wide, 6 1-2 feet long, 5 feet high, sixty-four 2 1-2 inch tubes 60 inches long, cast iron breeching, good as new.

Make Money!

Fortunes are yearly made by successful operators in **Stocks, Grain or Oil.**

These investments frequently pay from $500 to $2,000 on each $100 invested. Reliable correspondents wanted. Address for circulars,

WILLIAM E. RICHARDS,
Banker and Broker.
38, 40 & 42 Broadway, New York.

GOLD

fields are scarce, but those who write to Stinson & Co., Portland, Maine, will receive free, full information about work which they can do, and live at home, that will pay them from $5 to $25 per day. Some have earned over $50 in a day. Either sex, young or old. Capital not required. You are started free. Those who start at once are absolutely sure of snug little fortunes. All is new.

Established in 1859.

HENRY LEOPOLD.

Manufacturer and Dealer in all kinds of fine and plain

FURNITURE & UPHOLSTERY,

And Manufacturer of Counters, Shelving, Bank and Bar-room Fixtures.

Mattrasses and Vessel Furniture

A SPECIALTY.

Warerooms 798 and 800 Lorain-st., near Fulton. Factory 10 Willet-st.

CLEVELAND, OHIO.

"THE PROVIDENCE"

WINDLASSES, CAPSTANS, ETC.,

IN CANADA.

THE WINDSOR FOUNDRY Co

Have made arrangements with the American Ship Windlass Co. to build their Celebrated Machinery, with latest improvements for use on Ship-board for Canada.

FOR PRICES, PLANS AND ALL OTHER IAFORMATION APPLY TO

THE WINDSOR FOUNDRY CO.,

WINDSOR, HANTS COUNTY, NOVA SCOTIA.

THE BEST BOAT PAINT MADE.

THE B. & P. PAINT

Fire Proof, Water Proof, Acid Proof!

FOR IRON WOOD AND CANVASS.

Guaranteed not to Crack, Peel or Blister.

COLOR ONLY IN BLACK.

SEND FOR CIRCULAR AND TESTIMONIALS:

PARAFFINE PAINT CO., 244 South Water street, Chicago, Ill.

Our Paint is in use by Pacific Ocean Boats and by most all the Upper Mississippi River Boat Line.

O. & P. COAL CO. & THOS. AXWORTHY.

FUEL DEPARTMENT.

PRESLEY, ARTHUR & CO., AG'TS.

Steamboats, Tugs, etc , Coaled Day and Night.

DEALERS IN LACKAWANNA ANTHRACITE COAL.

Docks: Ft. West River St., Whisky Island, C. P. R'y. Slip, Government Pier

OFFICE 130 RIVER-ST., CLEVELAND, OHIO.

SEND FOR MARINE LAW BOOK

Which Gives all Points On Marine Law,

PRICE. ONE DOLLAR.

Established in 1857.

AMERICAN SHIP WINDLASS CO.,

Builders of Steam, Messenger Chain and Hand Windlasses, Power, Crank and Steam Capstans, Wharf and Ferry Drops. Their Capstan Windlasses have a Power Capstan with a single head which has power and speed arrangement entirely independent of the windlass, and which makes a direct connection with the windlass without the intervention of any gearing to complicate it and increase the friction.

In all their styles of Steam Windlasses they make a direct connection between the engines and the windlass without counter shafts or additional gearing. This saves friction and liability to break down and conduces to durability and ease in operating. They also have a counterbalance for the engines and an automatic lubricator for the worm and worm gear, and the engines are placed together in the most accessible position. The above improvements and others too numerous to mention, but which are familiar to Masters, Owners and Builders, are covered by Patents owned exclusively by this Company. For plans and information

Address,

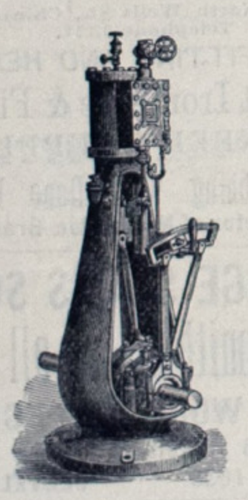
FRANK S. MANTON, Agent. P. O. Box 53, Providence, R. I.

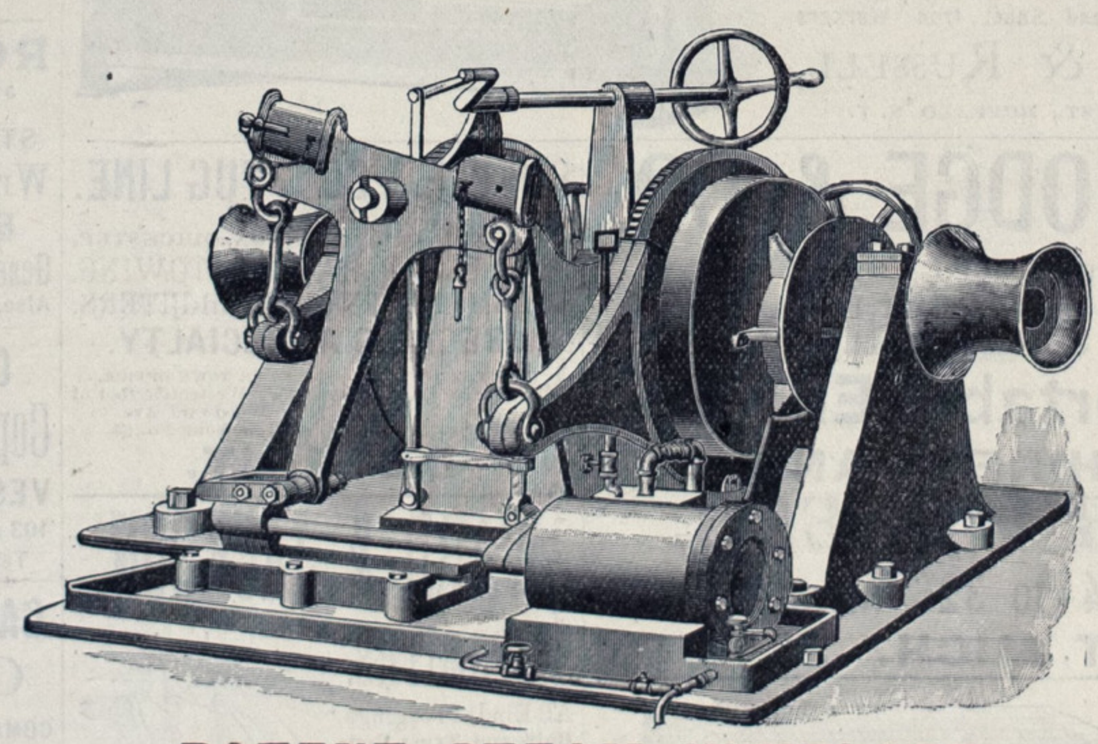
THE GLOBE IRON WORKS CO.,

CLEVELAND, OHIO.

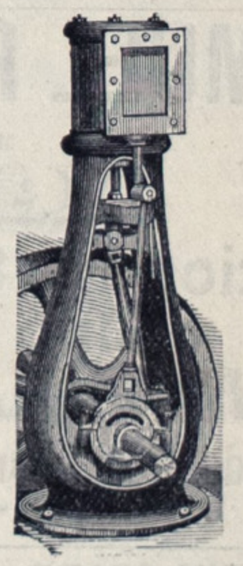
GENERAL FOUNDERS, MACHINISTS AND BOILER - MAKERS.

MARINE.





STATIONARY



PATENT STEAM WINDLASS.

High Pressure,
Low Pressure,
Condensing,
Compound

MARINE AND STATIONARY ENGINES.

HAND AND SPOOL WINDLASS,

AMAZEEN BEAM LOG WINDLASS,

Centerboard, Mast, Gipsey, Hatch Winches,

Water Seal Stove Pipes, Chocks, Coal Scuttles, Hawse Pipes Cleats.

MARINE AND STATIONARY

BOILERS,

SMOKE STACKS,

General Plate and Sheet Iron Work.

ENGINES FROM FOUR TO FORTY H. P. KEPT ON HAND.